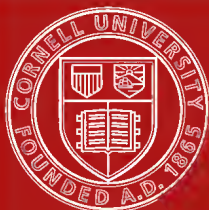


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THE LIFE
OF
GEORGE COMBE



Geo Combe

1836

from a painting by Sir Daniel Macnee, President of the Royal Scottish Academy

London, Published by Macmillan & Co. 1878.

THE LIFE
OF
GEORGE COMBE,

AUTHOR OF "THE CONSTITUTION OF MAN."

By CHARLES GIBBON.



IN TWO VOLS.

VOL. I.

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1878.

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ERRATA.

- Vol. I., Page 32, twelfth line from top, *for* "persume," *read* presume.
" 82, eighth line from foot, *for* "£2," *read* £20.
" 216, fifteenth line from top, *for* "mers," *read* mere.
" 229, fifteenth line from foot, *for* "Abraham," *read* Ahram.
Vol. II., Page 371, fifteenth line from foot, *for* "Peterkin," *read* "Dr James
Browne."

P R E F A C E.

FEW men have left such ample materials for a biography as George Combe; and if the whole man is not revealed in the following pages, the fault is entirely due to the biographer. Profound faith in the importance of Phrenology and in the philosophical and educational theories he evolved from it,—which constituted the chief interests of his life,—induced Mr Combe to preserve all letters addressed to him in relation to these subjects. He made no selection, but preserved with equal care those containing praise and those containing blame. From 1820 he kept copies of all his own letters; these occupy eleven large quarto volumes of 700 to 800 pages each, and six smaller volumes which he used when travelling. In addition, he left thirty journals, in which he recorded the chief events of his life, the ideas that occurred to him for use in his works, and, occasionally, extracts from the books he read which had any bearing on the subjects of his thought. My endeavour has been: first, to tell the story of his life as nearly as practicable chronologically and in his own words; second, to show the growth of his mind and character with as few repetitions as possible; and third, to keep the

exposition of the mass of materials presented to me within moderate bounds, without sacrificing anything characteristic of the man or his principles.

I am greatly indebted to Sir James Coxe, the nephew of Combe, familiar with his ways and doctrines, and editor of the last edition of his works; to Mr John Ritchie Findlay, who was an intimate friend; and to Dr Arthur Mitchell,—three of Mr Combe's Literary Trustees,—for their assistance in revising the proof sheets, and for their valuable corrections and suggestions.

For the convenience of readers, a brief explanation of the Phrenological terms used in the work is given in the Appendix, No. II.

CHARLES GIBBON.

GROVE HOUSE, CHAMPION HILL,
LONDON, 14th January 1878.

INTRODUCTION.

THE name of George Combe is now rarely heard in scientific or philosophical circles—seldom even in those of the advocates and practisers of that system of advanced education for the adoption of which he struggled hard and endured much abuse. But he is still a prophet to many men, and the spirit of his teaching has its place amongst unseen influences on modern thought. It is to be regretted that circumstances have delayed the publication of his biography until nearly twenty years after his death; because so much that was new and startling in his mouth has become an accepted part of the intellectual systems of to-day, that it will be difficult for readers to comprehend the bitterness of the opposition with which he had to contend. His anxieties may appear to be unnecessary self-inflictions, and the caution with which he directed his most daring flights instead of bearing its real signification of wise self-control, is apt to be confounded with mere prudence. Prudent in the highest sense, he was fearful of doing wrong; but having clearly realised a principle, he was fearless. These were the qualities which enabled him to bear present contumely, confident of future honour.

His first reflexions were full of doubt as to his position in this world, and of dismay regarding the next. He found a principle, and from that time his course became clear to him.

His actions and opinions became decisive—so decisive, that to the many who did not understand the earnestness of his convictions he appeared dogmatic. The principle which guided him through life was this: that there is a direct Divine moral government of the world; that the government is one of benevolence, and that its laws are plainly written in Nature for the direction of man. Phrenology led him to these convictions, and they formed the stand-point from which he viewed all the affairs of the world. His judgment thus based, proved generally correct in regard to affairs of the moment, and frequently almost prophetic in regard to the future.

He was reared in the gloom which was formerly a predominant characteristic of Calvinism in Scotland. A feeble frame and an impressionable nature rendered the mental and physical condition of his boyhood painful. A strange, thoughtful child, seeking reasons for everything, and dissatisfied until they were found, he grew into an earnest man, fervid in all his thoughts and acts. To the end, life was serious to him—most serious when he had a pen in his hand. The vital problems of religion early occupied his mind with anxious speculations. The terrors of eternal perdition weighed upon him, and the first glimpses of the light in which he saw the beneficence of God dazzled and bewildered him. The limited communication of the time localised ideas; and the expression of anything heterodox was visited with social penalties on the person who uttered it. When Combe first asserted, for instance, that Mind was a function of the brain, he was denounced as an infidel and a would-be subverter of religion. He cast aside all personal considerations, and hazarded his professional prospects to proclaim Divine truth as he apprehended it.

From 1817 till 1836, whilst faithfully discharging the duties of a Writer to the Signet, he was engaged in constant and fierce warfare in defence of Phrenology, and of the principles proclaimed in the "Constitution of Man;" he was advocating practical education; and, at the close of the period, standing

as a candidate for the Chair of Logic in the Edinburgh University. From 1837, when with a modest competence he retired from the legal profession to devote the remainder of his life to science and philosophy, till 1844, he travelled in England, America, and Germany, and frequently lectured on Phrenology, education, physiology, the laws of health, and the sources of the well-being of nations. From 1845 till 1858 he was the leader in the great struggle for Secular Education, the earnest advocate of prison reform, an expounder of the Currency Question, and was maturing those views on religion which found their final expression in 1857, in his work "On the Relation between Science and Religion."

Phrenology was in his eyes the key to all knowledge. He approached it at first in a spirit of scepticism; study and observation convinced him of its truth: he became its most able exponent, and more popular in this respect than either of its founders—Gall and Spurzheim. His devotion to it was intense; he viewed life entirely through its medium; he attributed to his knowledge of it all the good he tried to do and was able to accomplish; and he was too much inclined to think that all the failures of mankind were due to ignorance of its principles. He regarded it as a mixture of science and philosophy—science in its relation to the structure, and philosophy in its relation to the functions of the brain. It represented to him the most complete philosophy of mind. He did not believe that it was complete in itself: no system could be so in a progressive world; but he believed that it was the most complete of the time, and that it would grow and improve with every new discovery. His leading Phrenological doctrines were these: that the brain is the organ of mind; that size is a measure of power, other things being equal; that the formation of the skull bears a relation to the character of the mind, and that efficient moral and intellectual training will influence the development and action of the brain, as physical exercise affects the power and size of the

muscles. On these doctrines he based his theories of religion, education, the treatment of the insane, and prison discipline, which have spread and been absorbed unconsciously into the practices of others, without recognition of the source whence they were derived. The spirit of all his philosophy was that of benignity, of love for all created things, and of entire faith in the wisdom and justice of God, however incomprehensible their manifestation might appear to him in the present stage of his knowledge.

In religion he desired to obey the laws plainly expressed in nature, and he left the rest to God. He believed that the world is constituted in harmony with the moral sentiments: virtue *is* its own reward was the lesson he sought persistently and in many forms to inculcate. The conviction that good brings forth good, and evil brings forth evil in the moral and in the physical world, inspired his every action and every sentence he wrote. His creed was—"Do justly, love mercy, and walk humbly with thy God." And he exemplified it in his conduct. His sense of justice embraced trifles with as much respect as others pay to the most important duties; and his sense of mercy extended to the worst of criminals. He was devout in his reverence for God's laws; and he repudiated the idea of supernatural suspension of their action. He was unswerving in his claim for the right of every man to worship according to his own conscience; and he desired the removal of the Church Catechisms from the list of compulsory text-books in schools and colleges.

He desired that Education should be practical; that instead of instructing children in mere words—which was all that the majority acquired in the laborious waste of time spent in efforts to learn Greek and Latin—they should be trained in such knowledge as would be applicable to the duties they would have to perform in life. From his own experience at the High School of Edinburgh, and his observation of the teaching in other schools, he began in 1827 to

advocate, 1st, the extensive use in all schools of objects illustrative of nature; 2nd, that the pupils should be taught, in addition to the customary rudiments of education—natural history, biography, the history of foreign countries, of their productions, natural and artificial, and the principles of their trade, moneys, and mode of transacting business, in order that children might be brought to understand the natural laws that govern production, and the civil laws which regulate the transactions of men in different states; and, 3d, that the physical conditions necessary to health should form a principal part of general instruction. In this system he included nearly all that in after years he laboured so fervently to promote under the name of Secular Education. He persistently argued that it was of the first importance to the State that every one of its children should have an efficient education in order to produce useful citizens; and he insisted on the right of every man to his own form of religion; therefore he advocated the separation of the teaching of creeds from that teaching which is necessary to all sects alike. His Secularism was in no way antagonistic to religion.

In criminal legislation, he was opposed to capital punishment; and in prison discipline, he desired that the influence of the brain in determining character should be taken into account. He wished the criminal to be reformed rather than that vengeance should be wreaked upon him. He would, therefore, have had him placed under conditions which would enable him to realise the advantages of moral conduct, and to work out his own redemption by industry and reformed habits. Meanwhile he urged the legislature to strike at the root of crime by providing for the children of all classes a thorough system of moral training. He did not expect the good result to appear in one or two generations; but the result would come, and he considered that a century was of small account in the history of a nation.

His profound conviction that man's nature was progressive

and capable of improvement, rendered him an optimist in all his views. His life was full of activity, of earnest, methodical, and patient work. His sincerity in all that he undertook entitles even his errors to respect. Although precise and formal in manner, he was full of sympathy for every honest endeavour, and of pity for every human failing. His aims were always noble, and the whole purpose of his work and thought was to help his fellowmen. He had the qualities which attracted and retained the affection as well as the admiration of cultivated minds; and his interest in the progress of the world was so active to the last that his reading and observation were always abreast of the time, thus enabling him to be in his old age the intellectual companion of new generations of thinkers, into whose speculations he entered with the fervour of youth, controlled by experience. He had no great variations of fortune to distract him, no great domestic afflictions to distress him. The death of his brother, Dr Andrew Combe, caused him much grief, but the event had been long expected and prepared for. He viewed the approach of his own end with calm reliance on the goodness of God, and gratitude for the years of usefulness and happiness which had been granted to him. In the closing days of a long life he saw the principles he had advocated making progress; and many of his large circle of relatives prospering and honoured in their various paths, carrying out in practice what he had taught in theory and in the conduct of his life.

Much that he attempted has been accomplished. He helped largely to overthrow many theological and social prejudices, and to forward the progress of society towards greater equality of condition and greater happiness by means of universal and unsectarian education. His teaching and his aims have been much misunderstood, but he was able to say: "In all the great characteristics of my life, I fear no tribunal where justice will be administered. I shall be found to have lived as I taught and wrote."

LIFE OF GEORGE COMBE.

CHAPTER I.

AUTOBIOGRAPHY—BIRTH—LIVINGSTON'S YARDS—PARENTS—RESIDENCE AT REDHEUGHS FARM—THE PARISH SCHOOL—OVERCROWDING—AN EXPERIMENT WITH SUGAR-CANDY—ST LEONARD'S HILL—THE PRESS-GANG—ABSENCE OF RATIONAL TEACHING AND PREACHING.

Edinburgh, 18th January 1858.—I have for sometime intended to write an outline of my life, and for two days past the thought has been forcibly “borne in upon me,”—to use a religious phrase,—that I should no longer delay executing my intention.

I was born on 21st October 1788, a day subsequently rendered memorable by being that on which the victory of Trafalgar was gained. My mother used to observe jocularly that my advent to the world prevented her from attending the public celebration of the centenary of the “Glorious Revolution” of 1688, which took place early in the November following the date of my birth. Whether the themes of liberty, which she would be hearing and reading about as that time approached, had any effect in modifying the cerebral organism of her babe, I do not know; but certain it is that she then gave birth to a child whose ruling passion through life was to act the part of a reformer.

My birthplace was at Livingston's Yards, close under the south-west bank and rock of the Castle of Edinburgh. The

locality was low : to the east a Scotch acre of ground was a filthy swamp in winter, and covered with dunghills in summer. All round, to the east and south, were tan-works and a magnesia-work, which poured their refuse into open ditches with small declivity. The public drain, charged with the soil of the Grassmarket and Westport, two humble localities of Edinburgh, ran past the dwelling-house uncovered ; and the house itself was attached to my father's brewery. A more unhealthy residence can scarcely be conceived. To the north and west were gardens belonging to my father, and let to a market-gardener, and beyond them corn-fields. As the windows of the house looked in these directions, the view from them was open and cheerful, and gave the promise of health, which, however, the other influences destroyed.*

The house consisted of two stories ; but contained only two rooms, a kitchen, and bed-closet on the lower, and three rooms and a very small bed-closet on the upper floor. About the year 1797 or 1798 an additional room and bed-closet were built. The family, about the year 1800, included our parents, thirteen children, and servants, all crowded into these few rooms of small dimensions ; and the laws of health, depending on ventilation, ablution, and exercise were wholly unknown. The mind was regarded as independent of the body, and every one acted on this hypothesis.

These details may appear uninteresting to many persons, but they describe the causes of many deaths in the family, and of much bad health in those who survived, and of a degree of feebleness in my own constitution which, although not congenital, occasioned considerable suffering, and was with diffi-

* The locality no longer answers the description here given. The new approach to the High Street, by the road which skirts the Castle Rock, passes over the site of Livingston's Yards, and Scott and Croall's Horse Bazaar marks pretty nearly the spot where the brewery stood. The extension of the town, and the conversion of the swamp, which was formerly the bed of the North Loch, into the Princes Street Gardens, have further greatly changed the surrounding district.

culty only partially removed when the laws of health were discovered and obeyed.

My father was George Comb, brewer; and my mother, Marion Newton, daughter of Abram Newton of Curriehill. My father was 6 feet 2 inches in stature, and proportionally strongly formed in the trunk and limbs. His temperament was bilious, nervous, and sanguine, and his head was large. He was in his forty-third year, when I was born. I never knew him sick; but he told me that, in 1797, he had had an illness which led him to infest his wife in all his heritable property in life in the event of his death. From that illness, however, he recovered so completely that its anxieties were forgotten in the family.

My mother was a short, well-formed woman, with a highly nervous and bilious temperament, a dark, fine skin, dark eyes, and fine dark hair, and an energetic step. Her brain was of average dimensions and remarkably well proportioned, conscientiousness and firmness predominating among the sentiments. She had a quiet manner, combined with decision of character, and intuitive good sense. Her knowing organs were rather larger than the reflecting organs. She was in her thirty-first year when I was born. She suckled me and one child born after me; but her strength then became inadequate to the task of nursing, and all the children subsequently born were sent out to nurse.

The education of my father was limited to reading, writing, arithmetic, book-keeping, and the elements of mathematics applicable to mensuration. Grammar and spelling were not taught in his day at country schools; and his deficiency in both of these accomplishments was felt as an evil through his whole life, and greatly limited his sphere of usefulness. He had so much intellect as to be painfully aware of his defects. He wrote excellent sense and good composition, but with frequent errors in grammar, no points, and very incorrect spelling; and he avoided writing letters whenever it was

possible to do so. I have often heard him say that he would rather hold the plough for a day—which he had been accustomed to do when a young man—than write a letter of a page in length. The literary education of my mother was still more imperfect. She could read, but her writing did not extend beyond subscribing her own name; and this was the case although her father was the proprietor of his own land, and a freeholder of the county. She was accomplished, however, in every practical art of housekeeping. She could milk a cow, churn and make butter, wash, dress, cook, spin thread, shape and sew clothes for both sexes; and she had so much energy, activity, and method in her proceedings that she generally arrived at the end of her work before dinner,—then taken at 2 o'clock,—and she was dressed and ready to pay or to receive visits in the afternoon and evening. She was social; my father was full of benevolence as well as conscientiousness, and, considering the largeness of their family and their moderate income, they were both charitable and hospitable to a commendable degree.

I was said to have been born a fine, healthy child. The first clear consciousness of my personal existence dates from the year 1791 or 1792. I recollect then living with my father's eldest sister, widow of Walter Cunningham, farmer in Redheughs, a mile west from Corstorphine. She carried on the farm, and had, I think, two sons and two daughters, young men and women, living with her. They were all cheerful and kind to me. Mr James Reid, then farmer in Hermiston, a mile south-west from Redheughs, was a young man who came often to visit my aunt and cousins. He was a clever, intelligent person, and fond of jokes and fun. He gave me a large red field-turnip, hollowed it out, cut a nose, mouth, and eyes in one side, put a candle within, and astonished me by the apparition of a human face with a dark purple skin. He taught me to give myself a number of ridiculous names, such as Timothy, Peter, Baldy, Elshinder, and so forth; and for the sport which this

afforded he gave me a halfpenny. The list was closed with the name "Scoundrel Grant;" and I observed that when I wound up by giving myself this appellation there was a loud shout of laughter from all the company. I learned afterwards that it was the familiar appellation bestowed by the public on a legal practitioner in Edinburgh in those days. This hearty laugh led me in time to suspect that there was something not quite right in that name, and I then stopped short at it. Mr Reid tempted me by the offer of another halfpenny if I would complete the list. The temptation overcame me and I uttered, reluctantly, "Scoundrel Grant." The reward was bestowed amid renewed shouts of laughter; and then, for the first time, I became conscious of conflicting emotions—a source of much distress to me in later years. I was as much ashamed of the name, which I now strongly suspected to be bad, as I was pleased by the money, and had no longer pleasure in reciting my appellations. Some one at length told me what "Scoundrel Grant" meant, and from that moment no power on earth could induce me to give myself that name. I recollect seeing the farm servants put a red-hot iron into the mouth of a horse, and was filled with horror by the operation, the object of which I did not understand.

These incidents affected my predominant faculties—self-esteem, love of approbation, and conscientiousness were compromised by the appellation of "Scoundrel Grant;" and benevolence was shocked by the operation on the horse, the object of which, I presume, was to prevent the gums growing over the teeth, and rendering them incapable of masticating hay and oats. The strong impressions made on the predominant organs have left their traces when those of all other occurrences are gone. These are the only incidents that remain in my memory of my residence at Redheughs in my childhood, except the remembrance of the cheerful kindness of my cousins the Cunninghams, every one of whom died a few years afterwards. In later years I used often to look with fond interest on the

letters D. C., 1793, carved in the bark of a large tree near the house. They were the initials of David, a fine young man, one of the sons.

But another and more important incident is said to have happened to me at Redheughs. Gogar Burn, a small rivulet, runs through a "haugh," or small meadow, near the farm house. I have been told that I fell into it, wet my clothes, and remained out until they dried. The consequence was a severe cold which could not be removed; and, by the advice of the family surgeon, I was sent home to die of consumption. Of all this I have no consciousness; but I recollect lying for a long time in bed, and of my mother ministering to me, though no trace of suffering remains in my memory. At length I recovered, but I never was strong afterwards.

About the year 1794 or 1795, I was sent to the parish school of St Cuthbert's, at Mainpoint, Portsburgh, one of the lowest suburbs of Edinburgh, and near to my father's brewery. It was kept by Mr Waugh, a short, dark, wiry man, and reputed a good teacher. The school was up a stair; it consisted of two rooms, having the partition wall removed at the end next the windows, and there was placed the teacher's desk, from which he could look into both apartments. The rooms were small, low in the ceiling, and without means of ventilation except by opening the windows. They were crowded by children, almost all belonging to the working-classes. I entered the school in April or May, and in the course of the summer the heat and oppression of bad air completely overcame me. From 9 to 12 I could see to read; but in the afternoon, from 1 to 3, the letters of the book were surrounded by a haze, and I could not distinguish one from another. I told Mr Waugh of my condition, and he sent me home. When I returned from the school, and announced why I had left it, great wonderment arose in the family. My brother, John, suspected that I was shamming. He placed on the table a crumb of wheaten bread and another of oat-cake of similar size and appearance, and

asked me to tell which was which. They appeared so hazy that I professed my inability to distinguish between them. He then proposed to give me the aid of my father's spectacles. I used them and saw distinctly, and at once named the two crumbs correctly. John thought that he had now caught me ; for, said he, " a young person cannot see clearly with an old person's spectacles, and therefore, he must be shamming." I protested my truthfulness, and was deeply mortified at being supposed capable of deceit. After many arguments by my seniors, some for and some against me, my mother came to the rescue and said that she did not think I was feigning. She took me from the school and put me to sea-bathing at Prestonpans. I do not recollect my father being present at this trial, for his spectacles were sent for. My eldest brother, elder sisters, and my mother were the judges and jury ; but it is difficult for me to describe the poignant grief and indignation which the suspicion of untruthfulness roused within me.

The case now appears to me clear enough. I had been greatly weakened by the illness resulting from the cold caught at Redheughs ; the bad air of the locality and the crowded bedroom in which I slept—there were two beds in it and two occupants in each—had prevented me from gaining strength, and the whole system had been enfeebled by a long winter. Apparently, each night's rest so far recruited the vital powers, that I could see in the forenoon ; but on returning to the bad air, pressure, and hubbub of the school in the afternoon, the nervous energy sank, and prostration was the result. There was nothing anomalous in my seeing with my father's spectacles : he was little past middle life, and they were of low power. I was probably as much debilitated in brain and eye as an aged man, and the spectacles might therefore be as much suited to my condition as to his. All this was unknown to my excellent brother who condemned me ; for he was kind and just wherever he had knowledge to guide his judgment.

I recollect passing on the whole not an unpleasant summer

at Prestonpans. The churchyard was a favourite resort to me. I used to gaze on the tombstones and graves with great interest, and wonder where the souls of their tenants were. The sea, also, in its ever-varying moods; the ships sailing up and down the Firth of Forth, and the fishing-boats which, on bright calm mornings, studded the water for miles, were all objects of vivid wonderment and interest.

I think that I returned to Mr Waugh's school the following winter, but am not certain. What progress I made in learning to read in it must have been small. I was afterwards sent to a school kept by a Mr Campbell in a small separate building on the right-hand side of Middleton's Entry, Bristo Street. It is now used as a carpenter's shop. This teacher had been recommended to my father to assist in the evenings my elder brothers, John and Abram, with their Latin lessons for the High School, which they were then attending. He was said to be a "sticket minister," *i.e.*, a young man who had studied for the church, but who had not succeeded in getting a living. He had the aspect of great poverty; and my mother used to give him his tea every evening before the lessons commenced, and he made such a meal of it that we all thought that it formed his chief sustenance during the twenty-four hours of the day. My father's benevolence was the more gratified the more he saw the learned man enjoying his repast; for he had a great reverence for learning, being over-conscious of the evils attending the want of it in himself. It was this feeling which led him to educate his sons to the best of his ability and his lights. Mr Campbell proved but an indifferent Latin tutor, and my brothers complained that they lost places at school by giving his translations, and had their grammatical exercises condemned after he had corrected and approved of them. He had few scholars,—not above eighteen or twenty at his day school,—and all children of the working-classes. But he taught me to read and to spell after the fashion of those days, *i.e.*, I spelled and pronounced the words with a broad Scotch

accent, with no regard to stops or intonation; and without once dreaming that the words had a meaning. The discovery that English words in a printed book were signs of feelings and ideas did not dawn upon me till several years afterwards. One reason of this was that the only significant speech which I knew was broad Edinburgh Scotch; and it never occurred to any one to explain the meaning of English words to us children in this dialect. An English book was as unintelligible to me after I could pronounce and spell the words of it as was a Latin book before I had learned the rudiments of that language.

I was regularly taken to church in those days; but never understood one word of the sermon. This gave rise to a habit of inattention to spoken as well as to printed language, which was most obstructive to mental improvement. The preacher appeared to me to live and speak in a sphere so far above my condition and comprehension that I never attempted to follow him, but at once retreated within my own consciousness and there made entertainment for myself by spinning fancies and forming schemes,—good, bad, and indifferent,—to be executed when suitable opportunities occurred; or, whenever I was out of the reach of my father's foot and hand, I fell asleep, the refreshment of which was the only solid advantage I derived from my church attendance in those days.

During the following autumn I was sent to sea-bathing at Queensferry. I was boarded with Mr Inglis, a retired surgeon, who, with his wife, lived in a house with a garden, up a close on the south side of the High Street. They had no young people about them. The only inmate of their house of whom I have recollection was a good-natured, cheerful, old gentleman, weak in intellect, who boarded with Mr Inglis as a retreat from the world. By this time I was between seven and eight years of age, and full of activity. I have a vivid and painful recollection of the ennui of the months I spent there. The members of the family were all old, and had no sympathy with childhood. I slept on a "shake down" in the garret,

and the mice careered over me in the night. During the day I wandered to the harbour, but there were no ships in it; climbed the bank above the town, but found only corn-fields on its summit; built castles of wet sand and knocked them down again, all alone; and wearily, wearily did day pass away after day, bringing no change. The fair was held in the main street on one of these days, and all the world was full of life and gaiety. I walked west the town and east the town and heard merry voices, saw ginger-bread and toys on many stalls, heard showmen's music, and saw showmen's pictures inviting to enjoyment, but I was all alone, without a companion or pence, and a weary day the fair day, with all its external excitement, was to me. I was a shy boy, otherwise I might certainly have formed some acquaintances in the street; but I was warned not to take up with "blackguard boys," and every boy who had a worse dress than my own was included in this category.

There was only one exception to the monotony of this life. One fine day Mr Inglis found me on the pier watching a ferry boat, about to cross to the north Queen's ferry, a distance of about a mile. He and his old boarder had come to indulge themselves in a sail across and back, and I looked so wistfully my desire to accompany them that I was at last invited. My joy was great, for I had a passion for sailing and had never before been afloat. A soft west wind wafted us across, all too soon for me, but it was a day of exciting adventure. We went to the inn and had a bottle of nice ale and some sea biscuits. I rambled about the village, and trod on ground on which I had cast many a longing look from the other shore of the Firth, and returned considering myself a travelled youth. This pleasure never was repeated, and I was glad when, in the end of September, I was taken home.

About this period of my life the debilitating influence of the illness which began at Redheughs, of the unwholesome position of my father's house, of overcrowding in house accommodation,

and great errors in diet, produced glandular swellings, ending in suppuration. These weakened me still more; yet my brain had now become so strong and active that it carried me through every depressing condition. I used to blaze in active exertion for a few days until I was completely exhausted; then sank into such feebleness that the school was an insupportable burden, and on my return from it I lay on the sofa without motion all the rest of the day. After three or four days the nervous energy was recruited, and again enterprise and activity succeeded. This condition of alternating exhaustion and vivacity continued during my whole childhood and youth, and in a modified degree through the period of manhood; and I am still subject to it, although slightly, now in my seventieth year. The days of the greatest depression occurred between the 15th and 21st, and the highest vital power manifested itself between the 22d and 30th of each month. I shall be surprised if I do not die between the 15th and 20th of some month.* My sense of duty was so strong that I never complained, and very rarely asked leave to absent myself from the school.

About this time one of my mother's servants, named Janet Henderson, from whom I received sincere sympathy, observing my feeble condition said: "O, laddie, you should never marry." Young as I was I understood her meaning, and her remark made an indelible impression on me. My subsequent studies added force to her injunction, and for many years I combated successfully strong desires to enjoy the bliss of connubial love. This, however, is anticipating the story of future years; but the incident is deserving of record as an example of the influence which a passing observation of a sensible servant may exercise on the mind of an earnest and thoughtful child. It was before this period that the incident of the sugar-candy experiment, narrated in "Science and Religion," occurred.†

* He died 14th August 1858.

† The incident referred to is thus told in the introduction to "Science and

I gave the portions of the sugar-candy to my younger brothers and sisters disinterestedly, on being told that it was my *duty* to do so. The idea of a reward was entirely of the nursery-maid's suggestion, and, as she explained it, the prospect of reward which did not come did not tend to my moral improvement. She awakened a selfish feeling, and infused a trait of it into my expectations of the divine bounty. She, however, touched a chord that vibrated, and I have still a vivid recollection of the drawer in which I placed the lump, and of the deep anxiety which I felt to see whether it had increased in size during the night. I rather think that I assisted the appeal to Providence with my prayers: the infusion of the hope of a tangible reward debased my moral and religious notions; for I felt as if it would be a fine thing if I could be kind to my fellow-creatures, and then have my bounty returned to me by a direct gift from heaven. The Religion."—"An event so common and trivial as almost to appear ludicrous when introduced into a grave discourse, but which is *real*, gave rise to the train of thought which is developed in this work. When a child of six or seven years of age, I got from some benevolent friend a lump of sugar-candy. The nursery-maid desired me to give a share of it to my younger brothers and sisters, and I presented it to her to be disposed of as she recommended. She gave each of them a portion, and when she returned the remainder to me she said: 'That's a good boy; God will reward you for this.' These words were uttered by her as a mere form of pious speech, proper to be addressed to a child; but they conveyed to my mind an idea. They suggested intelligibly and practically, for the first time, the conception of a divine reward for a kind action; and I instantly put the question to her: '*How* will God reward me?' 'He will send you everything that is good.' 'What do you mean by 'good?'—will He send me more sugar-candy?' 'Yes, certainly He will, if you are a good boy.' 'Will He make this piece of sugar-candy grow bigger?' 'Yes; God always rewards those who are kind-hearted.' I could not rest contented with words, but at once proceeded to the verification of the assurance by experiment and observation. I forthwith examined minutely all the edges of the remaining portion of sugar-candy; took an account of its dimensions, and then, wrapping it carefully in paper, put it into a drawer and waited with anxiety for its increase. I left it in the drawer all night, and next morning examined it with eager curiosity. I could discover no trace of alteration in its size, either of increase or decrease. I was greatly disappointed; my faith in the reward of virtue by the Ruler of the world received its first shock, and I feared that God did *not* govern the world in the manner which the nursery-maid represented."

disappointment at finding no increase in the sugar-candy was imbittered by the experience that I had been benevolent entirely at my own expense, and that heaven declined to reimburse me for the sacrifice—a feeling which I should not have had if the nursery-maid had told me that the reward of generosity lay in the consciousness of doing good and discharging a duty. It was long afterwards that I discovered that this is the divine reward for benevolent actions, and that incidentally other rewards are added from the love and respect of those whom we have benefited and the esteem of society. My mortification, therefore, arose from misdirection of my faculties, which led me to connect selfishness with an emotion which ought to have been, and was at first, purely disinterested.

In the summer months of my earlier years I used to visit another sister of my father, who, like Mrs Cunningham, was a widow—namely, Mrs Margaret Sinclair. Her husband had been proprietor of a brewery, garden, and ground known as St Leonard's Hill, just under and a little west from Salisbury Crags. The ground was a miniature of Salisbury Crags, perpendicular whinstone rock to the west, a plateau of grass above, and then a rapid slope to the east, or north-east. The slope belonged to the King's park. She had two sons, grown up. The eldest, William, inherited the property and continued the business of his father; and John, the younger, was employed in a Russian warehouse, which, in plain English was a linen shop where reindeer tongues and honey imported from Russia were also sold. The whole family were exceedingly kind to me, and in summer the rambles on the hill, the amenities of the garden, and in autumn the plentiful feasts of gooseberries, freely placed at my disposal, have left vivid impressions of enjoyment. While I was staying there I saw a man and woman walking painfully near the verge of the highest part of Salisbury Crags: in a short time, I heard an alarm given that he had pushed her over the precipice, and that she was sadly mangled, and killed. She was pregnant to

her destroyer, and he took this savage method of getting quit of her and her promised offspring. He fled down the north-east slope of the hill and never was discovered. My imagination was terribly haunted by the recollection of this scene; and I was terrified to go to sleep lest I should see the murdered woman's ghost. The belief in ghosts was then universal in the juvenile circle to which I belonged, and a sore superstition it was to me, for I held every belief to be equally true as the most indubitable fact.

Two other incidents occurred during my visits to St Leonard's Hill, which left indelible impressions. My father had assisted a poor widow, named Leslie, to support herself and bring up her family. Two of her sons, Robert and Archibald, were bred ship-carpenters in Leith. They regarded my father and my aunt Sinclair, whose husband also had assisted their mother, with great respect; and to my father's children they poured forth their gratitude in every form of kind action within their power. Archibald had been induced to go one voyage in a whale ship to Greenland, to enable the ship to get to sea, for the French war was then raging, and the press-gang made it difficult to man the merchant vessels. On his return he delighted me with a description of his adventures in Greenland, and of the perils and excitement of whale-fishing. He used to be handy in carpentry work about the brewery, and was a great favourite with us all. But the press-gang paid spies for informing them of the haunts of men liable to be impressed, and his seagoing had brought him under their power. Some miscreant informed them of his liability and residence; he was torn from his home and friends and forced to fight the battles of his country on board a ship of war. It is impossible to describe the horror and indignation with which this event filled me. It gave the first rude shock to my feelings—which had hitherto been those of respect—towards the ruling powers of the state. I had worshipped good king George the Third, as every one called him, and looked on the Lord Provost

and Bailies, whose power and greatness were reflections of his, with reverence and awe. My notions about these magnates had been as vague, mysterious, and reverential as those of a pious and ignorant Hindu about Juggernaut; but now I regarded them as the representatives of incomprehensible malignities. This incident converted me from a loyal, trusting, natural Tory child (I say *natural*, for I had heard nothing of political parties in those days) into a demagogue and reformer; and innumerable acts of a harsh and occasionally of an immoral character, perpetrated in name of the Government, subsequently deepened the impression.

The third incident was a purely childish one. John Johnston, a joiner, had been working in the brewery, and I went with him into the town on some business. On the high road opposite Newgrange he met a sergeant of the Black Watch, as the regiment was then familiarly called (now, I believe, the 42d Highland regiment), a tall, important-looking man, in the Highland costume, with a huge cap, augmented in its terrors by large clusters of black plumes, and a fearful-looking iron-hilted sword at his side. After exchanging greetings with John, he, looking at me, said: "Is this your son?" "No, he is my employer's nephew." "I hope he is a good boy." "Oh, yes; he behaves very well." "I am glad of it, for" (laying his hand on his sword) "it is my duty to cut off the heads of all naughty children." I presume that I looked, for I felt, unutterable horror, which he perceiving, proceeded to enforce the incentive to good conduct he thought he had given me by observing: "The king, you see, pays and gives me this sword, and sends me out in his service, and I *must do something* for his money." I believed every word of this assurance, and for months afterwards never dared to venture on the highway or into the street without feelings of terror, and keeping an anxious watch in every direction to discover if any Highland sergeant was in sight. This way of playing with the feelings of children is highly injurious. Not only was I frightened but

my moral perceptions were again perplexed and outraged, for no act of misbehaviour which I had committed, or seen other children commit, appeared to me to justify cutting off their heads ; and henceforward I regarded a Highland sergeant as a sanguinary monster, like the ogres of fairy tales.

These may appear trivial incidents, but it should be observed that they and other similar occurrences formed the staple of my practical education. Neither in church, nor school, nor in the family circle, was one solitary rational idea communicated to me concerning my own nature, or the nature of men and things, or my own relationship to them. From the pulpit and catechism I learned that human nature was altogether prone to evil, and the knowledge of the world which I gained by induction from this kind of observation and experience confirmed me in this faith. God had given me an active intellect and highly sensitive emotions, and from the earliest dawn of clear consciousness I felt the conflict within myself of the lower propensities with the moral sentiments, and in life I heard justice and goodness enjoined as duties, but accompanied by the assurance that my nature was incapable of manifesting any virtue. I saw and experienced acts of great kindness side by side with measures of severity and ebullitions of passion and injustice. There was neither within nor around me any atmosphere of consistency, goodness, and truth ; but a constant conflict of emotions and ideas one with the other ; and the world was a chaos. All this might be reversed by rational teaching and preaching ; and the vivid recollection of the unhappiness in which I passed many days and hours of my early life, gave intensity to my subsequent desires to assist in introducing a better order of things. I was not constantly unhappy ; for naturally I was cheerful and disposed to take things by the right handle : all I mean to say is that great drifts of suffering were driven through the tenor of my life by the absence of consistent principle in the precepts, actions, judgments, and teaching of all by whom I was surrounded.

CHAPTER II.

AUTOBIOGRAPHY CONTINUED—THE HIGH SCHOOL—SYSTEM OF EDUCATION THERE—DISCIPLINE—MR SWANSTON'S SCHOOL—FAVOURABLE INFLUENCE OF THE PRESENCE OF GIRLS—CHARACTERISTICS OF THE TIME—HOME OCCUPATIONS—THE LOVE OF ANIMALS—THE WAR—THE EDINBURGH VOLUNTEERS—SUFFERINGS OF THE POOR—FLOGGING IN THE ARMY—THE MANNERS OF THE DAY—AN EXECUTION—SUPERSTITION.

ON the first day of October 1797 my father entered me as a pupil in the High School of Edinburgh. Mr Luke Fraser then opened the first or lowest Latin class, and I was enrolled under him. My father had a high opinion of him as a teacher, for, said he, "Mr Fraser plies the tawse,"—Anglice, beats the boys abundantly. His reputation in this respect was well merited; for I soon learned that he *taught* nothing, but, before dismissing us every afternoon, prescribed certain lessons to be prepared for the next day, repetitions and translations for the first and second, and "versions" in addition to those who were in their third and fourth years—for we continued under him four years in succession. In the morning he began at the top of the class, consisting of about a hundred boys, and heard each repeat the portion of grammar or other subject given out to be learned by heart. As we were never asked a word about the meaning of anything, the learning of this lesson was a mere act of memory, and I made myself master of it. Next came translation from Latin into English, or reading grammatical exercises in which the pupil was required to render the infinitives of verbs, and the nominatives of

nouns and adjectives into grammatical sentences. The parents of the richer boys hired private tutors, who, in the evenings, *taught* them how to perform these tasks ; but I had no help whatever, and found myself incapable of overcoming the difficulties of the lessons. In the morning Mr Fraser began with the dux, and he translated the first sentence, the next boy the second, and so on. If any fault was committed, the first boy below, who could give the correct words came up above the defaulter. Among these boys the lessons went on pretty smoothly ; but when the incapables were reached, then beating took the place of teaching. Mr Fraser exhausted his muscular strength, which was great, in inflicting blows, and saved his brain all effort of thinking. The torture and screams, and reckless injustice of this rule made us High School boys, when we met many years later in society, ask each other "under whom did you suffer?"

I soon discovered that by strict attention to the reading of the lessons by the higher boys, I could learn them myself ; and from that time I stood at that position in the class at which the *fourth* repetition of the reading commenced. During the first and second years, when the lessons were short, this position was from twenty-three to twenty-five from the top ; during the third and fourth years, when they were longer and more difficult, I stood between forty and forty-five from that elevation. By this means I escaped beating, except, which was not a rare occurrence, when our worthy teacher was disturbed by noise in a particular part of the school and was not able to distinguish who were the real culprits. He then held us all bound for each other's transgressions, and let loose upon us a perfect storm of lashes, striking on the head, arms, thighs, or back, whichever lay most convenient to his hand, and never ceasing till he was fairly out of breath and could beat no more. It is difficult to describe the indignation, the aversion, and the burning sense of injustice which this treatment excited in me. My delicate and sensitive frame and peculiar mental qualities

made me feel it more keenly than strong, gay, and unreflecting boys did ; but even they revolted against it.

The discipline waxed severer as time passed on, and in the third year it reached its acme. In the spring of that year Mr Fraser “stript and whipt,” to use his own expression, the boys at a great rate. I recollect one day seeing fifteen boys standing at a time in the middle of the floor with their breeches stript down, and he taking hold now of one and now of another threatening to commence the “whipping.” The door of the school-room was always locked during these proceedings ; and just in the nick of time a knock was heard. The order—“Put up your breeches, my dears,” was given and obeyed with lightning speed. Mr Fraser opened the door, when in walked Lord Meadowbank, one of the supreme judges—whose son, James Allan Maconochie, was a pupil in the class—and he was received with smiles and honied tones, which appeared like a burst of sunshine through an opening in the clouds in a thunder-storm. His visit lasted till the hour of dismissal, and the *victims* escaped. I cannot call them culprits, because they had committed no moral offence ; but some had made a noise, others had been guilty of a badly written “version,” and so forth. These inflictions were uniformly accompanied by a phraseology in utter contrast to their real character. When he called on a boy to hold out his hand to receive a shower of “palmies,” it was—“Here, if you please, my dear.” Whack, whack, whack ; scream, scream, scream. “It is all for the good of your soul and your body, my dear.” In the third year all this discipline appeared to him insufficient ; and, after announcing, “I must try a severer rod of correction, my dears. he walked to a small closet in the school, opened it amidst portentous silence, and brought out a short riding-whip, such as gamekeepers are armed with, and with which in those days they lashed the hounds. It had a lash of knotted cord, and a short, thick handle, with an ivory whistle at the end ; and with this “rod of correction” he commenced operations. The

lash twisted round the hand, leaving red scores on the skin, and, where the knots struck, in some instances drawing blood.

All this torture was a substitute for teaching. There was not a map or illustrative object of any kind in the school-room; and only on two occasions, during the four years, did he ever, to my recollection, address a word to us beyond translation and grammar of the baldest description. The first of these exceptions took place when we read the description of the bridge erected by Julius Cæsar over the Rhine, given in his "Commentaries." Our teacher had, according to tradition, constructed a model of the bridge with his own hands, and was proud of it. The fame of its great interest had been transmitted from class to class for many years; and we counted the days which should bring us to "the brig." At last the closet was opened, again in profound silence, and the model brought forth. It was placed on a chair in the middle of the floor, and we began to read the description. As there were many technical terms, he helped us by explaining them, and with conscious pride pointed out each stake and beam as we proceeded, and showed us its connections and uses. The reading and expounding lasted for several days, during which all the lessons were better learned than usual, complete silence reigned, and not a blow was struck. We thought ourselves in Paradise. But the model was removed, monotony recommenced, and the arm and "the tawse" were again employed to do the work of the teacher's brain.

The noise and inattention which provoked the teacher and led to much of this severity were the natural consequences of our condition. Fully half of the seats stood apart from the wall and had no backs. In summer we sat on them from 7 to 9 A.M., from 10 till 12 noon, and from 1 to 3 P.M.; and in winter from 9 to 11 A.M. and 12 to 2 P.M., without any intellectual occupation, except hearing the lessons repeated over and over again as they descended from the top to the bottom

of the class There was suffering from an uneasy position of the body, and nearly absolute vacuity of mind ; and this at an age when every fibre of the brain and muscles was glowing with nervous activity. If physiology and the laws of the healthy action of the brain and muscles, and the laws of mental action had been known in those days everything might have been different. The silence, pleasing excitement, and general good behaviour which reigned when we had an intelligible object presented to us, clearly indicated what was wanted to render us all happy ; but the hint was not taken. In point of fact, there was no other rational knowledge adapted to the young mind in our teacher's brain : *ex nihilo nihil fit* was exemplified in his whole teaching ; for the other instance of attention alluded to was due to the occurrence of a thunderstorm which frightened us by its darkness and proximity. This led him to describe a previous storm of the same kind, which had ended by a thunderbolt striking the front of the Royal Infirmary, quite near to the High School of those days, and breaking the windows on that side. He gave us some account of the nature of a thunderstorm, and how after a terrible crash the danger was past ; and thus sustained our courage till the clouds cleared away. No other items of general information except these two dwell on my memory as having been communicated during the four years of my attendance.

In 1797 the victory of Camperdown was won. I had now intelligence enough to read the accounts of the battle in the newspaper, and to participate in the excitement and glorification of the public mind, and entered fully into both. The anecdotes of the encounter were greedily devoured, and great was my wonderment *how* any structures of human hands could stand such a bombardment with such mighty guns (for I knew their size by my frequent visits to the batteries in Edinburgh Castle) as were described, and continue to float : and *how any one* was left alive at the close of the action to tell

the dangers of the fight. Indeed, this riddle in regard to sea-engagements remains unsolved in my mind to this day. There must be gross exaggeration in the narratives, or some element of safety not explained, to account for the killed being only twenty-five or thirty out of five or six hundred combatants, after a cannonade of four hours' duration, yard-arm to yard-arm, as the usual description gave us to understand. But the crowning glory was the illumination. I was allowed to accompany the family party which perambulated the town during its most brilliant hours, and no flights of my imagination had ever approached the conception of such a grand and exciting scene. My emotions of the sublime were roused to the highest pitch of intensity by the discharge of field artillery from the north side of the esplanade of the Castle towards the new town. The guns were far above our heads, the upper air was dark over the North Loch,—now the Princes Street gardens,—and every flash shone like lightning in the sky announcing the coming of the Lord to judge the world. In a moment again all was dark around the guns, and the echoes rolled away among the hills which approach the city. This element of grandeur has rarely been repeated in subsequent illuminations, but, unless my first impression was greatly exaggerated, it must ever be effective.

My health was so imperfect that, although never unfit for duty, I was taken from the school on the 1st of July in each year and sent to sea-bathing, first at Christian Bank, Trinity, and in subsequent years at the Citadel, North Leith. This interrupted the series of my school lessons, and if possible added to the inefficiency of the instruction there given. Moreover, profound ignorance of the relation between fresh air and the lungs, combined with the necessity for economy, led my mother to place four, sometimes five, children in one small room, in which also slept one of my elder sisters to take care of us. The room in the Citadel was on the ground-floor, and the north wall and window were protected from the sea by a

sloping buttress of large stones. There was also a window in the east, equally low. It was necessary to fasten the glass frames and barricade outside shutters to keep out the sea and thieves. The room-door was locked, for it opened into a common passage. Here then were we shut up for the night in an air-tight box. I recollect well of wakening every morning very miserable; but I ascribed this to the Fall of Man and sin. When the tide was full in the mornings I used to be handed out at the north window, wrapped up in a shawl, and in a second or too plunged over head in the cold, clear sea. The shock to my feeble, exhausted, and excited frame was terrible; but there was so much vitality in me, notwithstanding all these evil influences, that a speedy reaction took place, and the skin glowed with a pleasing warmth. This, with breakfast and the open air all day, set me up again, and I struggled through the depression of the nights; and on the whole was strengthened by the bathing. Not so my younger brother William, who, in bodily development, was greatly superior, although in cerebral endowment inferior, to me. When plunged into the cold water in the early morning his system collapsed; his lips became blue, and he shivered all over. Nobody conceived the cause of these phenomena to be scrutable; but compassion saved William from the early bathing, for it was found that by mid-day he was able to stand the shock.

Time wore on in this manner. In 1798 or 1799, I was sent to Mr Swanston's school in the High Street, at the Cross, to learn writing and arithmetic. It was one of the best of the kind in Edinburgh at the time. There was no beating, and no lessons to be learned at home, and there was some degree of teaching. The school was always crowded, and young ladies attended at the same hours, and in the same apartment, with the boys, but sat at tables reserved for their own use. Rude as we were these girls were always treated with respect, and they conducted themselves with that degree of becoming modest reserve which protected them from all attempts at

familiarity. Judging from 'my own' feelings, I think their presence had a favourable influence on us. They excited a kindly and gentle tone of feeling; and I should have felt myself far more painfully disgraced by censure for bad behaviour in their presence than among boys alone.

From a very early period of my studies in arithmetic I despaired of ever being able to learn it. I worked through the rules and performed the evolutions they described with slow laborious difficulty, and never acquired facility. I remained studying arithmetic long after my contemporaries had passed forward to higher studies. It was in vain for me to attempt algebra. It was an incomprehensible mystery. I learned, however, to write a plain, stiff hand in a reasonable time. These studies occupied two hours a day, five days in the week.

From the time I entered Mr Swanston's school till the end of my attendance at the High School, I was oppressed with too much mental work. In winter I was in his school and Mr Fraser's from 8 in the morning till 2 P.M., without any interval of repose; and in summer from 7 A.M. till 4 and often till 6 P.M. with only one hour, from 9 to 10 A.M., for breakfast. Add to this labour lessons to prepare in the evening, a constant feeling of inanition, especially during winter; cold feet and thin clothing, with no object in the world in my lessons to interest me, and it may well be conceived how the state of sin and misery brought on man by the Fall was to me a palpable, undeniable, experienced reality. A few explanations will throw light on the causes of these sufferings. Too much cerebral action, and a close, ill-aired bedroom, with three besides myself in it, made me in the morning low, listless, irritable, and without appetite. My mother had been taught that oatmeal-porridge and butter-milk were the best food for children for breakfast. The butter-milk was bought in large quantities from dairymen's carts in the street. Frequently it was not fresh when bought, and it

daily became more acid when kept. To my delicate stomach it tasted often like vinegar, and I revolted at the porridge. In my mother's eyes this was fastidious delicacy of taste, and she ordered the porridge to be kept for my dinner. I received a penny to buy a roll for mid-day sustenance. At that time the quartern loaf ranged from a shilling to twenty pence in price, and the penny roll was a small morsel for a young hungry, growing boy. On going out, however, I bought the roll at the first shop,—there was one close by my father's gate. I ate it dry, and had no more food till half-past 2, when I came home to dinner. My mother was not so severe as she had threatened to be, for she gave me a dinner that I could eat; but she never failed to have the porridge served in the morning. In all this she was actuated by a sense of duty alone, for she was ever aiming at our welfare. Ignorance was the rock on which her kindest endeavours were wrecked, and she was not to be blamed for not knowing what nobody else in her rank, or, so far as I have yet discovered, in any other rank of life then knew. The cold feet and thin clothing were the consequences of my own self-willed ignorance. She pressed flannel underclothing on me, but because it irritated my excessively sensitive skin I rejected it, and pleaded that it was good for me to learn to be hardy in my youth, to prepare for the trials and exposures of manhood: this was listened to, and the flannel was not forced on me. In the school, and in the West Church especially, in which in those days there were no stoves, I often sat chilled like an icicle, and my only surprise is how I survived so much irrational treatment and stupid conduct.

My constitution, which must have been originally strong, suffered permanent deterioration from all these injurious influences. The bones were imperfectly developed; and bent clavicles and a slight distortion of the spine, with chronic irritability of the mucous membrane of the lungs, were the consequences. The benches in the High School had no backs, but some of them stood close to the walls. I suffered greatly

from inability to sit upright, during the long hours of confinement, on the seats away from the wall ; and have no doubt that then and there the distortion of the spine was produced. I often abstained from getting up to the third " form " because the fourth stood next the wall and supported my back !

The battle of the Nile took place in 1799, and there were great rejoicings and a splendid illumination, of the excitement and pleasures of which I have a vivid recollection. Another incident of that time is worth mentioning. During my earlier High School days, the " Glasgow Fly " started from the White Horse Inn, Grassmarket, every morning, except Sunday, at 8 o'clock, went round by Linlithgow and Falkirk, as I was told, or, if not, by Midcalder and Holytown, and arrived in Glasgow at 6 or 7 P.M., and *vice versa*. It was a post-chaise, holding three on the back seat and one on a let-down or lift-up seat in front inside, and three or four passengers outside. It was drawn by two horses and formed the only public communication between the cities. After the victory a new four-horse coach, called the " Lord Nelson of the Nile," was started from the south side of the Grassmarket, which performed the journey in seven or eight hours ; a few years later this was succeeded by a " Long coach," also drawn by four horses, and carrying ten passengers inside. It went by the then new road by Bathgate and Airdrie, and accomplished the transit in six hours, from 10 A.M. to 4 P.M.

But to continue my narrative. I always had an active life and pursuits out of the school, when any leisure was left me. We had ample play-ground near my father's brewery. My brother Abram was only a few years older than I. He was very clever at all boyish games, tricks, and small mischiefs ; full of fun ; a builder of rabbit-houses, and keeper of rabbits ; passionately addicted to brass cannons and pistols, and the use of gunpowder in all its forms ; and I followed him, a willing pupil. There were a number of boys, sons of working-men, living in the neighbourhood, who formed our companions in

play ; but no boys of the genteeler classes were within our reach, the brewery lying close to the Westport and Grass-market, and far from the new town. I too built a rabbit-house, and bought a pair of rabbits which soon had a numerous progeny. The procuring food for them and cleaning their house were occupations, and the warm attachment I felt towards them was a source of great gratification. On two occasions, however, I grossly mismanaged them—one culpably, the other through kindness ill directed, but both leading to results from which I subsequently drew instruction. The first fault was neglecting to clean their habitation. Under the pressure of other duties I neglected this one, and merely covered over the old litter with fresh straw. In the course of time the female killed her young, and the buck was savage. This infanticide occurred again and again, and, true to the spirit of the age, I held up the slaughtered young before the mother's eyes and beat her well ; but did not clean her bed. At last when I resumed the discharge of my own duty, her aberration ceased ; but at that time I saw no connection between my own misconduct and hers. Many years later the study of physiology revealed to me my sin, and carried instruction with it. The organism of the animal was injured and rendered miserable by the dirt, and nervous irritability, akin to insanity, was the result. This example I subsequently applied to the case of the human poor, and saw in the deleterious physical condition in which many of them habitually live, the cause of some of their sufferings and crimes.

In the other instance, my compassion was moved by the supposed sufferings of my pets from intensely cold weather ; and I obtained leave from my father to transfer them from the house I had built for them, with the earth for their floor, to a loft having a deal floor and thoroughly enclosed and roofed. It had only a glimmer of light through panes of thick glass inserted here and there among the tiles. To my great

distress the rabbits grew sick, lost their hair ; their eyes became impaired ; they lost their appetite, and the buck became so miserable that I took him out to the garden, tied him to a stake, and tried my skill in marking by standing at a distance of fifteen or twenty paces and shooting him with my pistol loaded with a single ball. The ball broke his spine, and he uttered a piercing scream. The cry struck so deep into my moral nature, that it overwhelmed me with pain, shame, and remorse at the time, and has never lost its character in my memory since. I instantly put the animal out of pain ; but the dead body of the object of my warm affections was exceedingly distressing. This was not all, nor the worst of the case. My conscience told me that there was a spice of destructive feeling, and of pride in my marksmanship, which had seized the sickness of the rabbit as an occasion for their gratification : I cannot say *pretence*, for, in my state of ignorance how to cure, it was really an act of kindness to kill the creature ; but I abhorred myself for turning its sufferings into an occasion for gratifying feelings which conscience pronounced to be base.

Long afterwards I discovered that these sufferings of my beloved rabbits were the consequences of my having, through mistaken kindness, placed them in circumstances at variance with their nature. The ground was their native floor ; their fur protected them from the cold ; and abundance of air and light, which they enjoyed in the habitation I had made for them, were indispensable to their well-being : and these were all wanting in the loft. The instruction I drew from these occurrences was that, without knowledge of the structure and functions of a living organism, and its relations to the natural objects to which it is adapted and which influence its condition, the best intentions may inflict only suffering when pleasure is meant to be given ; and that this holds as true in the case of human beings as in that of rabbits.

I had also a pet cat ; was on affectionate terms with a pig,

and in the closest bonds of brotherhood with a fine dark-brown terrier, which acted as watch-dog and rat-slayer in the brewery. This terrier was one of our best companions in play. We gave him a cap or pocket-handkerchief in his mouth, placed him in the middle of us, six or eight in number, and then made a rush at him to take the article from him. He understood our object and kept us chasing, turning, leaping, tumbling, and laughing after him for half an hour or more; and when we were all fairly worn out, he quietly laid the cap or handkerchief on the ground, looked unutterable things, wagged his tail, and came round to us all to be caressed and praised. I loved that dog dearly, and was heartbroken when some scoundrel gave him poison in a piece of bread, apparently for the sake of obtaining his skin; but he had strength to come home and die, and the veterinary surgeon discovered the cause of his death.

Another public event caused great excitement in 1799, namely, the storming of Seringapatam. I recollect a panorama of it being exhibited in a space of vacant ground north of the College, which I passed three or four times a day, and great was my wonderment what it could mean. At length some one treated me to a sight of it; and the real nature of war was then for the first time brought before my eyes: its horrors far exceeded any notions of it I had been able previously to conceive. I saw that some of the combatants were black, and eagerly inquired *why* our soldiers were fighting with black men. To this question I have never to this day received a satisfactory answer.

Again, we had the battle of Alexandria and the death of Sir Ralph Abercrombie; and I vividly recollect attending certain military evolutions performed on the Links by the volunteer regiments in honour of his victory. The rebellion in Ireland, attended by burnings, slayings, hangings, floggings, and other outrages on humanity, was then also enacted and chronicled in the high Tory paper which my father took in,—namely, “The Edinburgh Advertiser,”—and the narratives of them were

eagerly devoured by me without guidance to my judgment, or the knowledge of any principle, human or divine, by which they could be reconciled to my natural emotions of benevolence and justice.

In those days the war came home to the consciousness of every intelligent being in the country. Volunteer regiments were embodied. The 1st Regiment of Edinburgh Volunteers was composed of gentlemen who provided their own uniforms, and received from the Government only muskets, belts, powder, and ball. There were three or four regiments of the inferior classes, whose uniforms were provided by the Government. All these, and also all the peace constables of the town were absolved from serving in the militia. This made the ballot fall with great severity on the unprotected members of the community between the ages of eighteen and forty-five. The premium for a substitute was as high as £40 and £50, and thus the whole burden of serving fell on the operative class. The numbers of them drawn was very large, because the militia soldiers were constantly tempted to volunteer into the line, and their places were supplied by the ballot. A man having a wife and three children and less than fifty pounds a year was exempted, and this tempted many to marry in hope of reaching the exemption before the ballot fell on him ; but he was often caught with only one or two children ; sons were torn from their aged parents, and young men naturally averse to war were forced to adopt a military life, and ruined and rendered miserable. The press-gang oppressed all sea-faring men of the humbler class, and forced them to serve in ships of war, for pay far inferior to that given in the merchant service. In my father's brewery I mingled daily with his workmen, and with tradesmen employed in making repairs and alterations in his premises and utensils, and heard the groanings of their spirits under all these abominations, and my soul burned with indignation. The Fall of Man and the guilt of Adam's first transgression appeared to be the only and the true solution of

them ; and often did I wish that the apple had stuck in his throat and suffocated him at once.

I have described the discipline of the High School, and my conviction now is that it had a most demoralizing effect on the boys throughout their lives, especially on those who embraced the naval and military professions. They often passed at the age of fifteen or sixteen from the rector's class to the navy as midshipmen, and to the militia as ensigns. They had been the victims of a system in which orders were issued prescribing duties to be performed, and in which flogging for non-performance was regarded as the chief duty of the master. In their new capacities they used flogging as the substitute for moral and intellectual influence in governing their men. They had never known what moral and intellectual influence was ; their heads were as empty as those of their men,—in many instances more so,—and they had no mental resources. They drank deeply, and flogged their men for getting drunk. They marched their companions to church on Sundays, saw them all enter, then wheeled at the door and went after their own pleasures. The irritated feelings of the men and their rude manners, pervading almost all classes in those days, rendered them averse to discipline, and flogging was the cure for all evils. His Majesty George III. was graciously pleased to limit the number of lashes in the army to 1000. This number was occasionally inflicted, and the sufferer was taken out at intervals and received the lashes in two or three instalments, his back being allowed to heal between each : 750 and 500 lashes were common punishments. My father's brewery lay close under the bank and rock of the Castle of Edinburgh below the new barracks. In an area between them and the Castle wall the punishment parades were held ; and on three or four days in the week they began at 9 in the morning and lasted till 11 o'clock. Occasionally the cries of the sufferers were reported to have been heard. I was generally in school between these hours and never heard them ; but on our play-days I recollect

well of seeing the barrack-windows filled with spectators mostly women, and the bayonets of the soldiers as they moved on duty along behind the wall, and we heard descriptions of the proceedings from persons who happened to be within the Castle at the time. On one occasion my brother Abram was accidentally a spectator of the punishment of a soldier, but could not stand it, and retired in disgust.

The common manners of those days were barbarous. There were floggings at the cart's tail of small criminals by sentences of the inferior courts! The cart travelled through the old town and stopped at particular stations, where so many lashes were inflicted. A man, nick-named "Thumbie Anderson"—I presume from something remarkable about his thumb or thumbs,—was so flogged; and after the operation it was said that he was not the real culprit, another having been discovered. My father's worthy friend, Mr Francis Slate, farmer in Meadowfield, near Corstorphine, on hearing this, remarked: "Well, there is no harm done, for if Thumbie was not guilty of that offence, he deserved the flogging for his general iniquities!" Offenders were also placed in the pillory, with the name of their offence painted on a board attached to their breast, and were pelted with rotten eggs and garbage for an hour. Hangings were frequent, and women were occasionally executed. The first execution I saw was by mere accident. The gallows projected from the west gable of the prison, the "Heart of Mid-Lothian," and stood 20 feet or more from the ground. Below it a semi-circle of shops, having a flat roof with a black high rail round it, formed an area on which the platform rested, and it afforded space also for the magistrates and their attendants. There was a door in the gable of the prison opening into this space, out of which the culprit and the cortège issued. The time of execution was between 2 and 4 P.M., and when there was daylight till past 4 o'clock, the hour was 3. I was proceeding from Mr Swanston's writing-school up towards the Lawnmarket, where stood the prison, on my way home at 3

o'clock on a Wednesday, the market-day, and found myself in a dense stream of people, all going in the same direction. I soon learned that they were going to the execution. The space between the Luckenbooth houses and St Giles' Cathedral, through which we passed, was a mere lane, and I could not escape. I was carried, therefore, involuntarily, into a position where I saw the whole proceedings, and a strange conflict of feeling arose within me. All my moral sentiments condemned me for being there, yet there was an intense interest which made me pleased with being present; and I consoled myself with the thought that I had not come intentionally. Certainly, the spectacle of a man being put to death interested the base of my brain. If I recollect rightly the sufferer had been a letter-carrier, and had abstracted money from letters. He was dressed in a respectable suit of black clothes. When the white night-cap was pulled over his face to conceal its expression of his dying agonies, and the white handkerchief had been placed in his hands, to be dropt when he was ready to die, the excitement was intense. In a very few minutes he threw the handkerchief down, instantly the bolt of the scaffold was drawn; and he fell and swung round in mid-air by the neck. For a brief time he made no motion; then came death struggles fearful to behold; and in four or five minutes more all was still in that unhappy frame. The crowd of men, women, and children then rapidly dispersed, and few remained to see the body cut down.

I have given this description to enable me to add that, neither in myself,—young, unsophisticated, and sensitive as I was,—nor in the other spectators, so far as I could discover by their talk, did this spectacle excite one thought of a nature calculated to deter us from crime. From some there proceeded coarse savage jokes, indicating that they enjoyed the execution; from others, compassion for the sufferer and his relations; and in my own case there was a chaos of emotion, one half of my faculties feeling ashamed of the other, and no clear daylight

discoverable on the point whether the execution was right or wrong. This was education! And what profit could come of it?

One incident impressed this scene very deeply on my memory. At that time boys wore round hats, having a black cord outside wound round the bottom with which to contract their diameter and make them fit the head. The night of the execution was clear starlight. After dark I issued from the house for some purpose; and, behold, between me and the sky hung the executed criminal dangling in his black clothes. I looked twice and there he was—there could be no mistake. I uttered a scream, and ran into the house as if his ghost had been pursuing me. The kitchen door was open, and I flew to the light. There I saw about three inches of the black cord depending from the front of my hat, having a knot on the end of it; and as this came exactly between my eyes and the sky-line when I looked up, the appearance of the unfortunate deceased was instantly accounted for. But I passed a restless and unhappy night; and it was many days before the scene faded from my mind so as to permit tranquillity to be enjoyed during the hours of darkness.

I may add that in my childhood belief in ghosts, and in the bodily appearance of the devil, was still general among the lower classes. I heard narratives from my father's and mother's servants of apparitions of persons deceased, and of encounters with the devil, that made my hair almost stand on end, and that rendered a dark room or passage terrible, and that made me tremble in bed when I heard any noise which I could not account for. James Elder, one of the workmen in the brewery, assured his awe-stricken auditors that, when he was in the service of the Lord-Chief Baron at Whim, he saw the devil hanging by the tongue on the branch of a tree in Whim wood. It was a clear starry night, and the devil was seen against the sky-line, swinging backwards and forwards. He called to James to come and help him down; and, before

reflection, his first impulse was to do so ; but the moment the thought occurred to him that no *man* could speak plain words while hanging by the tongue, he conjectured *who* it was, and ran off as quickly as possible, and escaped.

The practice of burying suicides at the point where four cross-roads met, and driving a stake through their bodies in order to prevent the witches or the devil flying away with them, had been observed within the memory of some of these servants ; and their descriptions of the ceremony, and the commentaries on the state of the souls of those deceased, who, having committed the crime of self-murder, necessarily left to themselves no possibility of repentance, filled me with terror. A poor hand-loom weaver hanged himself one night not far from our house, and for many weeks I was disturbed by the fear of seeing his ghost, and by compassion for his soul. All these narratives and impressions were *education* of my youthful mind ; and neither at school, church, nor in my father's parlour, did I hear one word to counteract them. In fact, discourses upon the Witch of Endor's apparition to Samuel, the ascent of Elijah to heaven in a chariot of fire, and other miracles, tended to confirm my belief in them as true events.

CHAPTER III.

AUTOBIOGRAPHY CONTINUED—WARLIKE AMUSEMENTS—RELIGIOUS INSTRUCTION—SUNDAY TASKS—LEARNING AND UNDERSTANDING THE CATECHISM—A CHILD'S IMPRESSION OF THE CRUCIFIXION—CALVINISM—SIR HENRY MONCREIFF—EFFECT OF GALL'S DISCOVERY—FAITH AND CONSCIENTIOUSNESS—PRACTICAL EDUCATION—PARENTAL AUTHORITY—MISTAKES IN TRAINING THE YOUNG—INCONSISTENCIES IN SCHOOL AND CHURCH.

THE war, however, was the great educator. My brothers and myself had cannons of all sizes and sorts, and, as we grew up, pistols. Our friends who were volunteers saved some of the cartridges supplied to them on field-days and gave them to us; and we dedicated most of our spare pence to the purchase of gunpowder and lead. We had bullet-moulds and an iron melting "ladle," and cast balls for our own use. We kept the neighbourhood in a state of disquiet by the noise of our explosions; and, when they discovered that we used balls, by fear that we should injure them or ourselves. There was occasionally some risk of this. I was firing with a small pistol at a mark placed on the inner side of the door of my father's garden, taking care to lock it on the inside to prevent any person from opening it unexpectedly and receiving the ball in his body. The door was so thick that the bullets lodged in it without going through. On one occasion, however, I struck a knot in the door, the ball drove it out and made a large hole. Had any one been passing at the moment, death might have ensued. Without mentioning the incident to any person, I bought a piece of putty and some Spanish brown paint the colour of the door, filled up the hole, and painted it over.

The putty hardened and stuck fast, the paint became blackened like the door, and the evil deed never was discovered. I had procured somehow about a foot of the butt end of the barrel of a common musket, had it mounted on a stock and wheels, placed it on the top of a small ale-cask, and pointed it against a mark of wood about eighteen inches square, supported on a stalk, and fired with ball till I had knocked the mark to shreds, so that it fell prostrate on the ground. Great was then the glorification of my Self-esteem and Destructiveness. The same faculties rejoiced in the death of rats and small birds shot by our pistols; but my crowning glory was the actual firing with my own hand of one of the great guns of the half-moon battery of Edinburgh Castle. I had made a friend of a bombardier, and he put the port-fire into my hand and gave me the word to "fire;" and the welkin roared with the report of the gun. There was to me a grandeur in this exploit,—for I was not then more than twelve years of age,—which roused Ideality; while the display of power embodied in the explosion gratified equally that faculty and Self-esteem.

Our classical studies also cultivated the warlike spirit, for they consisted of narratives of battles and conquests. The preachers in the West Church, in which we sat, *lectured* through the Old Testament; and the miracles and slaughters narrated in it roused our attention when nothing else did.

Our religious instruction from seven or eight years of age to sixteen or seventeen was conducted in this fashion:—On Sundays all labour, but that which was unavoidable, was suspended in the house and brewery. In the latter the horses and cow were attended to; and in malting and in the fermentation of worts, such labour was applied as was necessary to prevent the processes of nature from running to waste, but no more. We went to church from 11 A.M. to 1 P.M., came home at 1 and had lunch; went to church again at 2 and remained in it till 4 o'clock. We then had dinner; at 5 commenced learning a portion of the Shorter Catechism, and, when older,

the Larger Catechism, with the "proofs," or texts on which it was founded, and also six verses of a hymn or Psalm by heart. We had a hurried tea at half-past 6, or 7 o'clock, and again settled to learn our tasks: at 8 o'clock we were summoned to repeat them, and well scolded, but not beaten, if we could not say them correctly. Then we rehearsed the portions of the catechism previously learned; and concluded by sitting round the table and reading each a verse of the New Testament in turn, until we had read as much as was equal to a chapter for each. As there were six or seven of us capable of these exercises, the whole amounted to a heavy evening's task. Not a word of explanation of any kind was offered; and as we began to learn the Catechism and hymns long before our understandings were capable of comprehending them, our memories only were employed, and they were charged with mere words. So little did we reverence the Catechism or understand it, that after we had fairly mastered it all, we repeated one-third of it every Sunday evening. My mother read the question, and each child in succession gave the answer. We often forgot, all of us,—our mother included,—what section we had repeated the previous Sunday. One called out, "We begin to-night at 'Man's chief end.'" "No," said another, "we said that last Sunday; to-night it is 'No mere man.'" Perhaps a third cried: "We have said both of these; we are now at 'Effectual Calling!'" These were like mile-posts on a road; and to me conveyed no other idea than the point of our progress through the book. No family prayers were said, and this I believe arose from my father's modesty. He feared he could not do justice to so sacred a duty; for no printed prayers were sanctioned by the Scotch Established Church. We were all ordered, however, to say our prayers privately; and, as I had a conscience, I prayed before going to bed, silently, to the best of my ability.

These Sundays came after weeks of severe mental labour which overtasked my brain, and they were felt as a heavy addition to the toilsome load of learning unintelligible things

which oppressed my existence. Far from cultivating a religious spirit in me, they made the church, Sunday, and the Catechism odious. When I attained to fourteen or fifteen years of age, and began to understand the Catechism, and to listen to the sermons preached, my mind became distracted and confounded. In everything I was earnest and sincere, and tried to believe it all ; but the more I believed the more unhappy I became. I saw no ground for doubt ; for, as already mentioned, the whole world appeared to me to reflect the Fall and the sinfulness of man from every feature. But, then, the consequences were appalling ! Some persons were elected to everlasting enjoyment in heaven ; many more passed over by God's decree, before they were born, to everlasting torments in hell. I included myself at once in this category ; for the doctrine of Christ's having suffered for *my* sins and purchased my redemption, appeared inconsistent, first with a pre-existing irreversible decree, and, secondly, with benevolence and justice. When I read of the cruel persecutions and crucifixion of Jesus, far from drawing consolation from them, my sentiments of benevolence and justice were pained by the notion that, perhaps, *my* sins had added pangs to His agonies ; and no argument that He bore them all voluntarily *could* enable me to respect God who accepted them !

So severely did these ideas oppress me, that I envied the cattle that had no souls, and ardently wished that I had been as fortunate as they. I once told my father I regretted that I had been born. His only reply was—"Toots, laddie, these are wrong notions, and you must not harp on them." It was at this time that I ascended the Castle rock and gazed with such awful earnestness on the planet in the wake of the sun that had set, as mentioned in the introduction to "Science and Religion."* The preaching in the West Church deepened

* "In the Autumn evenings, I used to climb high up on the rocks of Edinburgh Castle which overhung my fathers house, and gaze with intense interest on the evening star that shone with resplendent brilliancy in the wake of the departed sun ; I longed to see into its internal economy, and thought: 'Oh,

these painful impressions. The Rev. William Paul had a large brain, in which the organs of the propensities and intellect were largely developed relatively to those of the moral sentiments, as I learned many years afterwards from a very faithful although inartistic portrait of him by Kay—a man famous in Edinburgh in those days as a publisher of portraits of local celebrities, and occasionally of caricatures, drawn and engraved by himself. It is a perfect embodiment of the preacher; and the terrors of the Gospel, the fire that is never quenched, the wide gate and the many that enter by it; the worm that never dies, the sinfulness of sin, the corruption of the human heart, &c., formed the themes of his discourses; and I believed them all and trembled.

At home we never talked on religion. It was too awful and painful a subject for us; and it was only in 1841, by a letter from my brother Andrew, who was nine years younger than I, that I discovered precisely the same impressions had been made on his mind, although he did not reveal them at the time. My brother Abram, who was older than I, of a less serious disposition, but thoroughly moral, also highly practical though not profound, made shorter work with the dogmas of Calvinism. He threw them all to the winds, and framed many a witty sarcasm and joke out of the materials which they afforded him. Mr Paul died in 1803, and was succeeded by

could I but discover that summer and winter, heat and cold, life and death, prevail in you as they do here, how happy I should be! I should then believe that this world is not cursed, but that you, the planet—and we, the earth,—are both such as God intended us to be!’ The distress occasioned by these impressions was aggravated by finding such doubts and difficulties described in the Catechism as punishments of sin, and ascribed to ‘blindness of mind, a reprobate sense, and strong delusions.’ I believe this to be the fact, because at that time I had not heard or read a word calling in question the absolute truth of the doctrines of the Catechism. The only information I then possessed about ‘unbelief’ and ‘unbelievers’ was derived from sermons preached against them; and it was not till a much later period that I became convinced that the feelings now mentioned arose from the instinctive revulsion of the moral, religious, and intellectual faculties with which I had been endowed, against the dogmas of Calvin.”—*Science and Religion*, page 5.

the Rev. Dr David Dickson, who, although a kind-hearted, indulgent, amiable man, preached in the same strain. The other minister was the Rev. Sir Henry Wellwood Moncreiff, Bart., familiarly named "Sir Harry." He, too, was orthodox but he was a man of strong sense, held a higher position in society than his colleagues, and he contrived to give to the doctrines a gloss of reason and common sense which greatly improved their character. One thing, however, puzzled me in his preaching. In the Catechism I was informed that "*all* Scripture is given by inspiration of God, and is profitable for reproof, correction, and instruction in righteousness," (I quote from memory at the distance of fifty-five years.) Nevertheless, in lecturing through the old Testament, Sir Harry made us pass over not only particular verses, but occasionally whole chapters as "not calculated for edification." He showed great sense in doing this; but I did not fail to recall the words of the Catechism and to wonder what it all meant. Were there, then, parts of the Bible which were *not* inspired? or did God dictate passages which Sir Harry could not read aloud to a believing and confiding congregation? There was constant preaching against the sin of unbelief; but, until I learned it from the pulpit, I had never thought unbelief possible. These inconsistencies and many others, which I detected as my reasoning powers grew in vigour, started doubts and inquiry, and the result is embodied in my published works.

One friend, and only one, I had with whom I conversed freely on religion in my boyhood. This was J—— L—— son of a widow, who lived quite near us and attended the same church. He was by far the genteelst, best mannered, and best behaved boy among us. I recollect telling him, after hearing a terrible sermon on Election, that it had made me very miserable, for I felt certain that I was one of those who were destined from all eternity to be passed over to the left hand at the day of judgment. He tried to correct my impression by recommending to me to call in prayer for the regene-

rating influence of the Holy Ghost, and I should be comforted. I told him that I had done so without effect. I should perhaps, have said that I had *tried* to do so, but that there was an antagonism between certain feelings in my mind and the thing I attempted to pray for, and the prayer never came off spontaneously or successfully ; for this was the literal fact. He expressed his surprise, and added: "The doctrine of Election gives me great joy, for I *feel* that *I* am one of the elect, and that I am sure of salvation." This was to me a striking revelation, and the effect of it was to deepen my conviction that I was one of the rejected, or rather foredoomed, and that my inability to reach his happy consciousness arose from my having a reprobate mind, which *could* not pray in faith.

It will be clear to the reader that I had a peculiar nature ; and that the effects of the doctrines on the people generally must not be judged of from their impressions on me. It may be well here to anticipate the narrative by a few years. After I became acquainted with Gall's discovery of the functions of the brain, and had extensively observed and studied the effects of different temperaments, and of differences in the relative sizes of the cerebral organs, a flood of light on these and other subjects broke in on my mind. My youthful friend is still living and is now Mr J——L——, S.S.C. After I became a phrenologist I observed that he had a fine sanguine, nervous, bilious temperament, excellent health, a brain of an average size, in which the organs of Veneration, Hope, and Wonder were all larger in relation to the other organs than in my brain ; while Self-esteem was well developed in both. In him the organs named were larger in relation to Conscientiousness than they were in me. Here, then, was a pious, believing, hopeful, happy mind, predisposed, or preordained to see its own prospects in the most agreeable light. The intellect was a fair average one, without much depth or comprehensiveness, and with no originality. Mr L——'s career corresponded to his gifts. He was bred to the law ; his piety, honesty,

activity, and amiable manners secured to him a respectable practice as a solicitor, chiefly from religious clients ; but he never became a leading man in his profession or in public business ; and he continues such a man to the present day. His course and mine soon took different directions, and although we have always recognised each other kindly in the street, we have had no personal communication, either in friendship or business during our long career. From the time my opinions were first published we both felt that there was an impassable gulf between us. His countenance still beams with a happy assurance of grace, and I have no doubt that his faith has been to him a source of perpetual sunshine ; while to me the same doctrines have proved a stumbling-block and a rock of offence.

The question of the truth of the faith is not involved either in his enjoyment of it, or in my sufferings under it ; but its adaptation to brains of particular combinations is implicated in these results, and thus perhaps also, indirectly, its truth. The faith which repels a higher and attracts a lower brain will fall when the convictions of the higher come to sway the public judgment. I do not decide the question between Mr L——'s brain and mine. His was unquestionably better developed in the organs of the religious emotions than mine ; and he would have been a religious man wherever born and educated. I, too, have always been a religious man, but after a different fashion from him.

In all this mental perplexity no explanation of anything was given to me. In the school the teaching was mechanical,—turning Latin into English and English into Latin,—and not a word was uttered about the relation of the lessons to any purpose of utility, and not a syllable about the *meaning* of the words : to know their equivalents in the other language was all that was required. My brother William having discovered that in teaching Greek the words were translated into Latin, said with great simplicity : “ Well ! what do you think ?—the

English of Greek is Latin!" And so it was in one sense, for we understood by English merely translation. In the church nothing was taught but the Calvinistic dogmas, and all manner of glosses of Scripture in support of them. In the domestic circle there was no knowledge to be communicated. My mind, therefore, was in a state of chaos.

My education in practical matters, however, proceeded in its own way. I had an intense love of nature, and of everything that displayed the power and contrivance of man. In the sea-bathing season, the sun on the waters, the ebb and flow of the tide, the ships which kept the Firth of Forth like a constantly moving panorama, the huge billows that lashed the shore and broke in sparkling torrents over the east pier of Leith, and, above all, when in a profoundly calm summer evening I watched—

"That line of light that plays
 Along the smooth wave towards the burning West,
 I longed to tread that golden path of rays
 And thought 't would lead to some bright isle of rest."

Then my soul soared above its ills and perplexities and thrilled with pleasure. Often did the exquisite emotions and dreams of a calm isle of rest described in these beautiful lines of Moore visit my consciousness, when, looking towards the sun setting over the Ochil Hills, and projecting that glorious line of light over the smooth sea towards them, long before he embodied the thought in these words. Shipbuilding and the interior and management of ships also excited profound interest, inquiries, and observations. One valued friend, Robert Leslie, an operative boat builder in Leith, was a perfect oracle of information to me on these subjects. In his master's yard I saw ships and boats advancing from day to day to completion; and the launch was a stirring and instructive event. He rowed us also in a boat up and down among the ships in the harbour, and occasionally took us out a mile or two beyond the pier. During the war, also, war ships came to Leith Roads, and a

fleet of merchant vessels assembled and sailed for foreign parts under their protection. I have seen from fifty to a hundred vessels hoist sail and glide away down the Firth; and intense was my wonderment in observing that first the hull and then the masts disappeared, until at last the whole ship seemed to sink below the level of the sea. I saw and wondered at this phenomenon for years before I understood the cause of it, all the time longing to comprehend it. But my imagination was still more excited by the idea that there they were all out of sight of land in the dark night, and no track on the sea to show them where to sail! What strange lands and people and things they would see beyond the ocean! What dangers from storms, rocks, and enemies they would encounter! Oh, it was a thrilling and engrossing subject of feeling, thought, and conjecture. There were, besides, small gun-boats rigged as brigs, employed to protect the coast, which occasionally came into the harbour; and once or twice they brought in a French privateer as a prize. I visited these vessels again and again, gazed on their armaments, and gathered every item of information about their exploits that could be gleaned.

Natural scenery also—the small rivulet, the “Water of Leith,” then comparatively pure and stocked with trouts and minnows; the hills around Edinburgh, the valleys, the Castle rock and its fortress, all excited and filled me with pleasure. There is a “dam head” at the village of the “Water of Leith,” where, in a flood, the water pours over a precipice of nearly twenty feet in height, and dashes into a pool below. I have stood, in a pouring rain, thrilled with delightful emotion gazing on the thundering cataract, for such it then seemed to me. At a later period the Falls of Niagara did not excite a stronger feeling of the sublime than did this waterfall in my childhood.

In the close neighbourhood of the brewery there were tan-works, currying shops, a magnesia manufactory, a small iron-foundry, a pump-maker’s yard, and blacksmith’s shop. I frequented all of these, and observed everything that was

done in them, and mastered the *rationale* of the operations with one exception. The magnesia-work was kept close locked, and it was named "The Unknown Work." I was familiar with all the processes in the brewery, and when subsequently I studied chemistry scientifically, I was so thoroughly master of the trade that I carried it on by means of assistance for several years, as will afterwards be mentioned. From observing these processes of practical art I gained a great deal of knowledge which added to my general intelligence in after days, and, besides, served to exercise my understanding, which was sent to sleep at school. I obtained a practical illustration of the nature and effects of bombshells by an incident which occurred in the foundry. A large hand-grenade had been bought as old iron and put into the smelting furnace, which was shaped like a cone, the narrow end downwards. The grenade exploded and blew the contents of the furnace up through the roof and around. Fortunately, there was no one in the shop but the master, and he was blowing the bellows, which screened him from the missiles. The story of the accident soon spread, and I beheld the devastation with amazement. About this period of my career, also, our summer lodgings were in Couper Street, North Leith, and there I saw ball and shell practice from guns and mortars in Leith Fort, directed against targets and flags placed on the sands during the recesses of spring tides. I could never trace the flight of the cannon balls, but the bombs were discernible from the moment they emerged from the smoke of the mortar till they fell on the ground; and a beautiful course they exhibited in their flight. Very few struck the mark or flag-staffs, and I learned from this that these deadly-looking instruments are really not so certainly messengers of death as the uninitiated civilian is led by descriptions of battles and sieges to believe. Since those days, however, practical gunnery has been much improved.

My four years of "suffering" under Mr Luke Fraser came

to an end in 1801; and I well recollect the emotions which animated me as I left his class-room for the last time. I ran down the stair three steps at a time, in an ecstasy of pleasure; and on leaving the High School Yards, turned round, opposite the infirmary, and wished to God that I had the command of a battery of 24-pounders for a day to blow the school to atoms, so that not one stone of it should be left on another! So painful was the impression left on my *sensorium* by this worthy man that, for years after I left his school, when I saw him coming in the street, I retreated to the opposite pavement to avoid passing near him!*

On 1st October 1801 I was entered as a pupil in the same seminary, but under a new master, Dr Alexander Adam, the rector. As a teacher he was a great improvement on Mr Fraser. He was old, but had still a sparkling eye, with a nervous, sanguine, and bilious temperament. His knowing organs predominated over the reflecting, but these also were pretty well developed; and he manifested Benevolence, Conscientiousness, and Philoprogenitiveness. He had published dictionaries and "Roman Antiquities," which were much esteemed. If I recollect rightly, there was a map in his class-room, and he *taught* us something, spoke kindly to us, and beat us gently and never without reason. If I had been prepared for his class I should have profited by and enjoyed his instruction, but I was *not* prepared. I knew

* Dr Andrew Combe's experience under Mr Fraser was very different from that of his brother, and the contrast is interesting. Writing to George in 1841, in reference to his school days, Dr Combe says: "In October 1809, I moved to the Rector's class, then under Dr Adam, who soon died; and in the interval which ensued between his death and the appointment of his successor, we passed under the government of Mr Luke Fraser, now, however, an altered man. Age had made an impression on him, and he ruled with such a lax and unsteady hand, that disorder and amusement became the order of the day. In a short time one-half the boys betook themselves to Arthur's Seat every alternate day or so, and were never missed. In truth, their progress was in no way thereby impeded. They inhaled health, and enjoyed fun, while those who attended school, of whom I was one, yawned, drawled, and played tricks by turns upon poor old Mr Fraser."—*Life of Andrew Combe, M.D.*, p. 12.

nothing perfectly or systematically, and I followed the same plan in his class as in Fraser's—kept so far down that I learned the lessons by the repetition of them by the boys above me. There was one exception to my non-intelligence. Scanning, or giving the rules for the long and short syllables in the Latin poems and in Buchanan's Latin translation of the Psalms of David, was to most boys an impossibility. The structure of the different kinds of verse was to them an unintelligible mystery. In one of my school-books I found a lucid, systematic explanation of it, comprehended it easily, got the rules by heart, and could apply them *ad libitum* to every kind of verse. Dr Adam discovered this attainment, and when some puzzling line descended from a high grade in the class unscanned, he would stop at me half-way down towards the bottom, and say, "Now, *you* can answer this, why don't you speak and get up?" He was right, but I spoke not; for the good reason that I knew I should have immediately fallen from my high estate, and preferred the humble position which I could retain.

I have ever since been puzzled to account for this acquirement, because I am deficient in the organs of Tune, and Number, and Imitation. Time is pretty well developed and has always been active; rhythm is believed to be connected with it. My impression is that the reflecting organs penetrated to the perception of system and order in the recurrence of the long and short syllables, and that it was through them that I succeeded. Certain it is, and perhaps the fact is anomalous, that I had not a quick ear for the longs and shorts in English poetry, and when I tried to write verses made a sorry figure. One anomaly in my mental constitution used to puzzle Dr Adam. Every afternoon he gave out one or two pages of his "Roman Antiquities" to be learned and discoursed of next day. He did not require us to repeat the words, but merely to show, in answer to his questions, that we had read the pages and knew the sense of them. Most boys enjoyed this exercise;

but I was a complete dunce in it. I *read* the passages carefully at home, but they did not interest me. My intellect had been trained to repeat words without thinking of their meaning; and I read the "Antiquities" and saw no meaning in them! I could not, therefore, tell the sense which I did not see, and the *words* were not required. This bad teaching was aggravated in my case by a small organ of Individuality, which gave me a feeble capacity for learning details. Had any one expounded the text to my reflecting organs I should have mastered it easily.

At the end of September 1802 I left Dr Adam and the High School for ever. My feelings were now much softened towards it. I respected and even loved the venerable kind-hearted rector; and under his sway, being freed from terror and the constant irritation kept up in my moral faculties by the harshness and injustice of my former master, the beauties of the Latin classics opened upon me, and I enjoyed many pleasant hours with Ovid, Virgil, and Horace, even under all the disadvantages of the literal and tame translations and monotonous repetitions of the school-room. In looking back on those five years of youthful life wasted at this school, my regrets are doubled by the reflection that had I been taught rationally I had both inclination and capacity to learn; and I well recollect how the waste of my father's money and my own time sat heavy on my conscience all through those dreary days. I often asked, What is the use of this education? but never received a satisfactory answer.

As already remarked, however, I had a peculiar nature. The clever boys who had competent private tutors stood habitually at the head of the class, and were respected and well treated. Dr Adam used to allow them to leave the school when he saw ennui oppressing them from listening to the blundering repetitions of the duller boys. The strong, rough boys, full of animal life, and endowed with only average moral and reflecting organs, took everything easily. When

beaten unjustly they viewed it as a misfortune, and not being troubled by too much conscience they shirked work wherever it was possible. In athletic games in the High School Yards they strengthened their muscles, aerated their blood, enjoyed high spirits, and "rubbed along," hoping that one day it would come to an end. The account of the High School, therefore, which those youths gave, when grown into men, was considerably more favourable than that now sketched; but many felt the discipline as an oppressive tyranny; and in Lord Cockburn's "Memoirs" it is alluded to as such that if practised now the teacher would deserve and probably receive transportation.

Few of my school-fellows rose to distinction in subsequent life. One, Alexander Wood, went to the Scotch Bar, and was elevated to the Bench. He was a genteel, handsome, well-behaved boy, always master of his lessons, and [at the head of the class; and he has passed through life with this character unstained. He is an excellent man, and a good judge; and while I write he still lives, although in feeble health. No other boy whom I can recollect attained to any equal position in society. Several went to the Bar, and others became Writers to the Signet; and those of us who are left have still kindly feelings towards each other originating in our common sufferings in those scenes.

The activity of my moral and intellectual faculties, and of my animal propensities also, was a source of great unhappiness to me, left as they all were to well forth in utter ignorance of their own nature and objects, and undirected by any intelligent and self-consistent discipline. My father and mother never gave us any instruction. They set excellent practical examples before us. They were both highly moral, had an abhorrence of debt, never shrank from their duties, and were kind to the destitute people around them, and to their poor relations. Their industry was unceasing. But they owed all these excellent qualities to nature. As already mentioned their education was very defective, and they had never been accus-

tomed to use their intellects beyond the sphere of practical duties. They appear to me, now, to have laboured under an extreme diffidence in venturing on counsel or explanation on any moral or religious subject, lest they should err and mislead us; and probably also they were conscious of inability to expound principles and enforce precepts in consequence of the untrained state of their own intellectual faculties. Be this, however, as it may, the fact is that they only ordered us to do or not to do certain things, and scolded us heartily if we failed. My father never beat us, for a reason which he communicated to me before he died. His mother had once beaten him unjustly and severely, in a fit of passion, and her conduct had left an indelible and painful impression on his mind through life. "I forgave her," said he, "but I could never *forget* the injury. I mentioned it to her in later life, and she begged of me never to name it to her again. From the moment of the infliction, child as I was, I formed a resolution that no provocation should induce me to leave a similar impression on the mind of any child of mine; and I have kept my word."

Dear, good, old father! you did keep your word: but you gave us orders; we were remiss in obedience: you threatened severe consequences; we discovered that you did not execute your threats: we calculated on impunity, and continued our play when we should have been doing our duty to you: you then threatened louder and louder, until Abram used to whisper to me—"He is now near the striking pitch; we had better go." And then we went; but I went sullenly, the love of self-indulgence pulling one way, conscience another, and fear only supporting conscience at last. The conflict between the love of self-indulgence and conscience was in me perpetual, and it was a source of great unhappiness. Yet I was not vicious; and my moral and intellectual faculties were naturally so strong, and my Love of Approbation and Adhesiveness so vigorous, that one word of moral counsel accompanied by

kindness, approval, or commendation, would have subdued my selfishness and made me docile as a lamb: but it never came. With a nature highly affectionate I never received a caress; with an ardent desire to be approved of, and to be distinguished for being good and clever, I never received an encomium, nor knew what it was to be praised for any action, exertion, or sacrifice, however great: and humble as was the figure I made at school, I did my best, and often dragged my weary bones there when, with a feebler sense of duty, I should have gone to bed. Then my reflecting faculties were active in their own way. I was constantly asking *cui bono?* and got no answer. The education given me in the High School bore no relation that I could discover to the duties of my domestic and social life; and the religion which I learned from the pulpit and Catechism appeared a matter for Sundays only. I never saw or heard it acted on as a practical rule of conduct. On the contrary, I was systematically taught that my religion and the world were at open war; and truly all observed facts and personal experience confirmed the truth of this assurance. But all the while my faculties *desired good*, and also consistency between profession and practice, and, above all, intelligible views of the objects and aim of my being. It often struck me as unaccountable why so much time and labour should be expended in making me read the histories of the heathen gods and their crimes, while I was informed that they were all false gods; and why Christianity and the heathen mythology should be imparted as branches of instruction of equal importance. In the school the boys who knew all about the Pagan deities were our heroes, and Christianity was never alluded to. In the church, God, the prophets, Jesus, and the apostles, were all in all; the divinities of the High School were rarely mentioned, and then only as sinful idols. I saw the inconsistency of this tuition, but was only bewildered by it. Another point I recollect well. The church and Catechism gave such a thorough bias to my judgment that for many years, after

intelligence had ripened, I read the Bible and it never reflected anything but Calvinism. The texts which directly contradicted the Catechism never suggested an idea, or received a moment's attention; and it was an achievement accomplished only in full manhood to be able to read the Scriptures honestly and impartially, and to judge of their import from the plain meaning of the words.

I mention these details, childish and serious, to open the way to the remark that no boon would have equalled to me an exposition of my own faculties, of their relations to domestic and social life, and of the line of duty which their constitution and relations obviously prescribed. And if I had been trained by intelligence, gentleness, and firmness to walk in that line of duty, I should have been a happy boy and a better man.

On the 17th day of September 1802 my youngest brother David, a child ten months old, died of smallpox. This was the first death that happened in the family within my recollection, and the first occasion on which I had looked on the cold, stern reality of death. The event excited a great turmoil in my mind. It was to me bitter and bewildering, and explicable only by the Fall. I looked on that dear, placid, spec-covered face, which so recently bloomed in health and was radiant with smiles, and thought it hard that he should die for sins committed by our first parents so many thousands of years ago. But the funeral over, things resumed their usual course, and David was forgotten.

In 1800 my sister Marion, immediately younger than I, was seized with a lingering illness. I was much attached to her, and spent all my play-hours beside her, trying to cheer and amuse her. The example of our parents taught us never to complain of suffering which arose from the operations of nature, or, as we were then told, was "sent by the hand of God," and no murmur or expression of impatience ever passed her lips. She died on the 30th September 1807.

CHAPTER IV.

AUTOBIOGRAPHY CONCLUDED—FAMINE IN SCOTLAND—STRAITS OF THE COMBE FAMILY—THE THEATRE—THE UNIVERSITY—EARLY BELIEF IN JUSTICE—TEACHING YOUNGER BROTHERS AND SISTERS—THE DESIRE OF FAME—THE QUESTION OF A PROFESSION OR TRADE—APPRENTICED TO A WRITER TO THE SIGNET—GEORGE HOGARTH—AN ELOCUTION CLASS.

THE year 1800 was made memorable by public suffering. The crop of 1799 failed, and in 1800 there was a famine in Scotland. The effects of it were terrible. Innumerable horses were brought to the tanworks near the brewery to be slaughtered, because the carters who owned them, and earned a livelihood by their labour, were unable to purchase food for them. If I recollect rightly, oatmeal rose to the price of 3s. for the stone of 16 lb, whereas 1s. and 1s. 6d. were the prices in good and average years. The war taxes pressed heavily on all; and there was no free trade in those days. The quartern loaf rose to twentypence, and my father paid £4, and in one instance £5 a boll for barley. His trade was all but ruined; for the starved people had no money for beer and ale. The poor were driven to desperation, and I recollect of assaults being made on the carts carrying oatmeal to the market; the sacks were ripped open and their contents carried off by haggard men and women. There was no police force then embodied: a company of worn-out soldiers, under the name of the Town Guard, being the sole civic protectors of life and property in Edinburgh.

My father's family was then in its most expensive and

unproductive state. Thirteen young mouths called for food and clothing, school fees and books, and made no return. My mother and elder sisters brought every resource in their power to bear on the evil. They baked bread, made clothes, and economised in every possible way. My father sold a house and small piece of ground in the village of Bathgate, inherited from his mother, and used the price in paying his way through that dreary season. Every article purchased was paid for when delivered, and the pinch and pressure were felt in their full severity each day; but the brave old hearts, although often desponding, bore up and fairly weathered the storm. The return of plenty and the revival of trade found them unbroken in fortune and in spirit; and we young ones ate our coarse fare, and wore our old clothes as cheerfully as if we had never known better days. Many families were less fortunate; they sank under the pressure, and their children lost their position in the middle ranks. The mob attacked the farmers on the market-days; and on more than one occasion some of them sought and found refuge in the brewery yard, which was completely enclosed by high walls and a gate. The people believed that the farmers were taking advantage of their necessities to extort high prices—a blunder long participated in by many persons pretending to erudition and a good station in society.

When I was between ten and twelve years of age, an incident occurred which produced a great effect on my mental faculties. John Duff was a door-keeper of the Theatre Royal, and also keeper of a tavern. In this latter capacity he was a customer of my father's brewery; and my father, as in duty bound, reciprocated favours by purchasing tickets on the night of Mr Duff's benefit. John, Abram, and I were treated by our father to tickets to the two shilling gallery. There was a terrible crush; but my elder brothers were strong and protected me, and we got good seats. The play was "As you like it." Miss Duncan was Rosalind, and Rock was Touchstone.

I forget who played the other parts; but the drama, dresses, and scenery opened up to me a new and a higher world than I had ever previously imagined. There was in the drama an elevation of language; in *Rosalind* a combination of beauty, sprightliness, and refinement; and in old *Touchstone* a ponderous sententious wit that thrilled me with pleasure; while the sunshine and verdure in the forest of *Ardennes* appeared like *Paradise before the Fall*. There was so much gaiety and good nature in the persons on the stage that they gave me a glimpse of what I had long ardently desired to see—people refined, contented, and happy; for, as I did not understand the entire drama, they appeared to me in this light. This, too, was the first occasion on which I had heard the English language familiarly spoken; for all my social circle spoke *Edinburgh Scotch*; and it was the first instance also in which I had seen moving and heard speaking, persons whom I considered to be ladies and gentlemen. The play was to me a revelation of a higher life, and it left an indelible and beneficial impression which never faded from my memory.

In November 1802 I entered the first *Humanity* class under Professor John Hill, in the University of Edinburgh. In the October preceding I was sent to learn geography and mathematics under Mr Robert Darling, *Warriston's Close*, who had been a teacher of reputation, but was now a very old man—I should suppose about eighty. His school had dwindled down, at the date of my attendance, to one or two pupils besides myself. The total isolation of my father and all my relations from the educated classes left him without knowledge and advice concerning the merits of the teachers to whom he sent his sons. In this instance he was particularly unfortunate. Mr Darling was not only behind the year 1802 in his method of teaching but was mentally effete. He had been, however, a man of talent, and he was still very good. I liked and respected him, although I profited little by his instruction. By way of teaching me geography, he made me repeat, without

using the maps, the boundaries, capitals, towns, rivers, and mountains, &c., of all the principal kingdoms, learned by heart from a printed book. It was an offence in saying the lessons to use the maps as aids to memory. As I was conscientious I abstained from studying them, and crammed my memory with pure words to the best of my ability. As, however, my capacity for learning words without meaning and uninteresting details was very slender, I forgot yesterday's lesson in learning to-day's; and the result was that at the end of the course I was as ignorant of geography as at the commencement. This was an evil which followed me through life; for, literally, now in my seventieth year, I do not know the geography of any country, or even of any county in England and Ireland which I have not visited personally, or been led to study by the events of a war or other incidents giving it a temporary interest!

My mathematical studies under the good old man were equally unfortunately conducted. He showed me how to use the compasses and scale in drawing figures; but, again, his teaching consisted in hearing me repeat the demonstrations of the first six books of Euclid by heart, without reference to the diagrams; and the same with trigonometry. The diagrams were before me, but he never explained the *rationale* of them. I did not discover this; and as he was satisfied with my rattling off the words I confined my attention to them. These lessons evaporated as fast as they were learned; and thus my mathematical instruction was marred, and never was repaired. I contrived, however, to discover some principles or reasons in trigonometry; and having procured a quadrant and a linear measuring tape, I measured the heights of the West Church steeple, and the top of the new barracks in Edinburgh Castle above my father's yard, and came pretty near to the recorded truth.

At a later period I took up Euclid and studied analytically a number of the problems in order to discover whether there

was any *causation* implied in the reasonings which constituted the demonstrations. I found that the conclusions arrived at in many of the problems appeared to me self-evident truths, apparent and indisputable from the diagrams alone, and that the whole reasoning in geometry consisted of comparisons of different portions of space and number.

I may mention that at the High School, obscene books, with pictorial illustrations, were in the hands of many of the elder boys ; and that for several months the sole fellow-student, who attended Mr Darling's class with me, was a young sailor, of twenty or twenty-one, who came to learn navigation. He expected to obtain the command of a merchant vessel from Leith in due season. He belonged to the middle ranks, and was a fine, bold, generous, off-handed character, but very profligate ; and he made me the depository of histories of his amours and debaucheries which were well calculated to corrupt and lead me astray. There was no response, however, in my nature to such allurements : I saw their true character ; and his lessons increased my knowledge without subverting my morality.

It will be obvious from the incidents described in this book that I was far from being an apt scholar, under the then prevalent system of teaching. At a later period I discovered *why* I was so.

On entering Dr John Hill's first Latin class, I soon found myself unprepared for it. I could not master the lessons, and had no assistance at home. We were now supposed to be young gentlemen, and there was no corporal punishment, no place-taking, no "keeping-in." In short, those who were able and willing to learn were taught, and those who were not, were left nearly unmolested, if they only kept quiet and allowed the business of the class to go on. This appeared to me a most reasonable arrangement ; and those boys who were of my mind and in my condition, voluntarily took seats on the back benches, and allowed the clever boys to occupy those in

front, next to the professor. He and they went on harmoniously and successfully together. I sat quietly, listened and learned what I could ; but studied nothing at home, and, so far as school education was concerned, gave myself up to mental vacuity.

In November 1803 I entered Dr Hill's second class for Latin, and passed this season in the same manner as the first. Although I made no progress in acquiring the Latin language, I derived considerable pleasure from hearing the Latin classics read and explained ; and have no doubt that they furnished me with a standard of taste and an interest in literary composition, which developed itself at a later period spontaneously. Cicero, Horace, and Virgil were my great favourites. I was delighted with Cicero's Orations, and could read a few of them with ease. In reading Cæsar's Commentaries, and the histories of Livy and Tacitus, I never sympathised with the conquerors. The other boys generally identified themselves with the "nostri," *i.e.*, the Roman soldiers. I constantly asked what right they had to invade and conquer Gaul and England, and my "nostri" were the people of these lands fighting for their freedom. I mention this, because the effect of our classical studies, unaccompanied by a moral commentary, was to foster the love of conquest and dominion, and to sow the seeds of Toryism in the yet undeveloped average mind.

During those years of college attendance I was employed by my father in teaching my younger brothers and sisters reading, writing, and arithmetic for one hour each evening except Saturdays and Sundays, for which he paid me a small fee quarterly. My teaching was framed on the model of those who had taught me : I ordered my pupils to learn, and scolded and beat them when they could not say their lessons. I liked teaching, but I had been taught almost nothing, and had no notion that it was my duty to transfer knowledge from my own brain into the brains of my scholars. I look back with regret at my own performances as a teacher, but I was supposed,

equally by my parents and pupils, to be discharging my duty with ordinary success.

I was never taught drawing ; but a family named Wintour, sons of an excise officer who lived near us, had a talent for drawing. I used to admire the performances of Alexander, the eldest of them, and tried also to draw. I obtained a drawing-book and materials, and laboured hard ; but I failed in form, proportion, perspective, and colouring, and after wasting much paper gave up the pursuit. My eldest brother, John, studied music and played Scotch tunes well on the violin. I became familiar with the notes of them and could name them when played ; but I never could recall one note after the instrument ceased to sound in my ears. I learned to dance, but failed in adapting my movements accurately to the music. I was fond of the constructive arts, and built rabbit houses, made bows and arrows, kites, fishing-rods, &c., but I never could finish any of them well. My brother Abram greatly excelled me in all these accomplishments ; but he stood still lower in musical talent than I did : for to him music was a mere noise, whereas I *perceived* both time and melody when the instrument was sounding, although I had no memory for notes. I was also utterly unsuccessful in my arithmetical studies, after six or seven years' application. The explanation of all these defects was clearly revealed when I became acquainted with Phrenology. The organs related to these studies were deficient in size, and Imitation also was small.

It must have been about this time (1802-3) that I first became conscious of feelings which characterised and exercised a great influence over my subsequent life—namely the desire to obtain distinction by doing good. In bed I used to shed tears of sorrow and disappointment on contemplating the apparent impossibility of this wish ever being gratified. I was conscious of having made no attainments in my education that promised to produce or lead to anything useful. I had no distinguishing talent for any pursuit. I saw some boys

linguists, others musicians, painters, contrivers and constructors of all sorts of objects, and some bold, daring, and wicked. In all of these gifts I was deficient. Then I was placed in social circumstances which appeared to preclude my rising in the world. I wondered if any distinguished man had ever been as poor, as humbly situated, and as ignorant as I then was. The source of these desires is easily found in my organism and temperament; but there is no doubt that my Latin studies, such as they were, fostered them. The love of fame was often mentioned in the classics as characteristic of a great mind; and the ardent desire of Themistocles to command it, and the observations of Cicero concerning it, found a response in my inner nature. In this respect there was a great difference between my brother and myself. In his "Life," a letter from him to me, mentions that he never had the slightest consciousness of a desire for fame or distinction. He loved good, and pursued it solely for its own sake; whereas the desire to be esteemed for doing good acted in me as a strong spur to urge me onward in my career.

And here I must record one great benefit I derived from the lax discipline of all my teachers in the years 1802-3. During those years my brain got nearly a complete rest; and as I was growing rapidly, this was an advantage which in its ultimate consequences fairly counterbalanced the want of much of the learning which I lost by habitual intellectual indolence. During my whole previous attendance at schools, my brain had been overtasked, and the health and growth of my physical frame impaired. As already observed, I had a conscience, and in all my failures it urged me to do my best, or punished me by painful upbraidings when I sacrificed duty to pleasure, which was very rarely the case; and thus my nervous system was kept habitually on the stretch. In those two years, however, my brain got a rest, disturbed only slightly by the accusations of conscience, but it also became to some degree involved in the general apathy which possessed me.

In the beginning of 1804 the important question of a calling became urgent. In my serious hours the sense of my own demerits and of the obligations of duty was so strong that I was ready to do anything or be anything my parents proposed. I had no bias, and no practical desire beyond that of maintaining myself by honest industry in any useful sphere. I was feeble, delicate, and of a shabby appearance. Some proposed the trade of a seal-engraver, but I had shown no talent for so difficult an art. Mr Patterson kept a small, dark shop near the head of Warriston's Close—opposite the Luckenbooths, which then encompassed the High Church—in which he sold woollen cloth, flaunels, and smallwares, and he was reputed to have acquired a competency in this vocation. My father, after some preliminary negotiations, took me to him and asked him to receive me as an apprentice. I went willingly, and well recollect the obscurity of the shop, the smallness of the counter, and the stillness that reigned around, for it was a dark winter day, and I thought that I should certainly be able to act a part in this sphere. But Mr Patterson took me to the door to obtain light to view me better and turned me round and round : and then politely told my father that I would not suit !

He took me home, and communicated the disappointment to my mother. Not a word was uttered in my presence to indicate what thoughts the incident had excited in their minds but a few days afterwards I found myself descending the High Street with my father, on our way to the North Bridge, where I was to be presented to another cloth merchant and offered as an apprentice. I think the firm was that of Yule & Abernethy, but as I never reached the shop I am uncertain as to the name. On our way, and very near the North Bridge, we met Mr William Arnott, Bailie of the Canongate, who had been married to a sister of my father (then deceased), and he accosted us. My father told him of my rejection by Mr Patterson, and where he was now going. Mr Arnott said : “ I think you are wrong. You have given George a good education : we have a numerous

connection in town, and there is no writer among us. I think he would find some employment among us as a Writer to the Signet." My father replied that he always understood that high, rich, and influential connections were necessary to success in the law, and that in the case of his son all these would be wanting. But Mr Arnott persevered, and my father said he should go home and consult "Marion," my mother. The case ended by Mr Arnott finding a Writer to the Signet, Mr Alexander Dallas, the partner of John Alexander Higgins, of Newck, W.S., who agreed to take me as an apprentice for five years at the close of the session of the College.

This change of destination filled me with alarm. Mr Dallas told my father to bring me at the close of the session to his office in North Frederick Street, with a certificate from Professor Hill of my attendance at his classes for two seasons; and that he, Mr Dallas, would present it with the petition to the Society of Writers to the Signet for leave to take me as an apprentice. My conscience was suddenly aroused, and I became terribly alarmed lest Professor Hill should decline to give me a certificate in consequence of the utter neglect with which I had pursued my studies in those two years. At the close of the session, however, I was astonished to receive from him the following document.

"Edinburgh, April 13, 1804.

"That the bearer, Mr George Combe, attended the Humanity Class in the University of Edinburgh two years, and prosecuted his studies with great diligence and success is attested by

(Signed) "JO. HILL, *Lit. Hum. P.*"

I cannot say that I was as much gratified as surprised on receiving this attestation, for my conscience told me that I did not deserve it. I presume it was a mere form issued to all.

A very few days after I left the college, I was introduced to the office of Messrs Higgins & Dallas, W.S., on the east side

of North Frederick Street. John Alexander Higgins was proprietor of a small estate called Newck, three miles north from Falkirk; and Alexander Dallas, a highlander, had been his clerk, then his apprentice, and, having entered Writer to the Signet in 1803, was now his partner. In point of fact, however, he continued to act as clerk, kept the books, sat in the office down-stairs, and his sole assistant when I entered was George Hogarth, son of Mr Hogarth, farmer, Carfrae Mill. He was then in the fourth year of his apprenticeship to Mr Higgins. Long afterwards he became musical critic to the *Morning Chronicle*, and Charles Dickens married his daughter.

This was the turning point of my destinies. I was animated by such a strong sense of duty and of the obligation to support myself as early as possible in order to relieve my father of part of the burden of his too numerous family, that I was willing to do anything and to endure anything that should tend to this object. I had no bias or predilection for any particular vocation; and I had suffered so much from feeble health—without being off work—and harsh treatment during my previous years, that no future could, in my apprehension, be worse than the past, and I had borne it without shrinking or complaint. I went, therefore, with equal good will to Mr Patterson and to Alexander Dallas; but I now see how important the accident was which sent me into the office of the Writer to the Signet. There was in me a latent power of mind which could not have found scope in the small sphere of a Lawnmarket shop, and it is highly probable that in a few years when my brain became active I should have diverged into pursuits incompatible with commercial success. My brother Abram made shipwreck of his life and fortunes by an error of this kind. He became a tanner, because near the brewery there were tanworks into which he often went in his boyhood; but nature had given him an active brain and the organs of an engineer. The tanwork did not occupy half his mental power. He managed it well, but he had so much

spare brain and spare time left that he invented machinery, experimented on carriages and boats, became a social reformer; and ended by raising £36,000, and trying Owenism at Orbiston in Lanarkshire, in which enterprise he sacrificed his life and nearly all his worldly substance, dying at forty-two. He placed his tanwork in charge of a partner who managed it well, and his share of the stock in it was all that he left to his wife and children. Had I been placed in the smallware shop it is probable that my history might have been written in similar terms.

The defects in my education now became more than ever, and very painfully, apparent. I was not dull or stupid: on the contrary, I had intelligent notions concerning the thing which had come under my observation and experience, and also a quick apprehension and practical understanding: so much so that when sent with messages relating to business I rarely failed to bring back satisfactory and intelligible answers. But when placed at the desk and furnished with a style-book containing a printed form of a simple law paper, with notes instructing me how to fill up the blank spaces left in it, with names, dates, and sums corresponding to the business in hand, I was completely *dercuté*. My faculty of language had been trained to act on its own account, separate from my judgment, and in my new vocation it could only blunder when acting by itself; for my reflecting faculties had never been taught to deal logically with language. It is difficult to describe my obtuseness, slowness, and blunderings in this work. I could copy with tolerable correctness, although very slowly, because this required no thinking. George Hogarth had been far better educated. He had a sanguine, nervous bilious temperament, large knowing organs, with large Language, Tune, and Ideality, and was in the fourth year of his apprenticeship. He eclipsed me altogether in every attainment and accomplishment. He had, however, large Love of Approbation and good Benevolence; and if his Causality and Conscientiousness had

been equal to these organs he would have been a first-rate man. He discovered that, although I was awkward and ignorant, I was neither dull nor conceited, and he acted very kindly towards me. He assisted me in all my professional difficulties, was always gay, exceedingly quick and active, and he readily taught me such of his attainments as I was capable of learning. These were French and Stenography. He wrote and spoke French grammatically and fluently; he taught me the pronunciation and grammar, and also corrected large numbers of exercises which I wrote. Within six weeks of the commencement of his instruction I read "Télémaque" straight forward, with comprehension of the meaning. In a short time also I mastered Mavor's system of shorthand writing. This was the first real teaching I had enjoyed; and I may say that George Hogarth was the first person who recognised in me any capacity above common-place, and who incited and encouraged me to improve.

In all my education the cultivation of the English language had been deplorably neglected. I had learned to read, and through the medium of Latin understood English grammar: but no attention had been bestowed on my pronunciation, and it was incorrect, vulgar, and slovenly in the extreme. Lessons in English Composition were never dreamt of; and as to Elocution, I had scarcely heard the term used, and was actually puzzled to know exactly what it meant, when in May 1804, Mr Dallas recommended me to attend a course of instruction in that art, for the improvement of my style of reading and speaking. I attended Mr Scott's lessons for three months from 5 to 6 P.M. five evenings in the week, and was much interested and benefited. He was a refined, natural gentleman, aged, but still vigorous. He had published the text-book which we used, under the title of "The Beauties of Eminent Writers;" and it fulfilled the pretension of its title. It consisted of extracts selected with taste and judgment from the best prose and poetical literature of England. Mr Scott read one of the

passages aloud, and each of the class, consisting of seven or eight youths of my own age, read it aloud after him. I was struck with the differences in the manner of reading of my class-fellows. Some imitated our instructor admirably, without appearing to catch an idea of the sense of the passage; others gave meaning and their own expression to it, but could never reflect Mr Scott's tone and expression correctly; while one or two read words only, without tone, expression, or intelligence. I belonged to the second category, and could never imitate Mr Scott, although he occasionally commended the intelligence of my reading in my own way.

Every Monday we were expected to repeat a passage from the text-book selected by ourselves. Again I was interested by observing the differences in the characters of the pieces chosen by my different class-mates. Some sought the gay and humorous; others the solemn and religious; one or two the fiery and the warlike. My selections were occasionally laughed at, for they embraced passages from Shakespere, Milton, Young's "Night Thoughts," &c., to the grandeur and beauty of which my mind was wakened for the first time by the pathos, delicacy of rendering, and calm strength of our instructor's reading. I recollect well the burst of merriment which broke forth when Mr Scott said: "Well, Mr Combe, let us hear what you have selected," and, in perfect gravity, I began Milton's "Description of Satan," for such was the title of the extract. I stood abashed until Mr Scott came to my rescue, and said: "Why do you laugh? That is one of the finest passages in 'Paradise Lost,' and it shows good taste and appreciation of its merits to have chosen it." These words produced a thrill of pleasure through my whole frame, for I had so strong a desire for praise for praiseworthy qualities, and had so very rarely enjoyed the gratification of it, that this commendation, so decided and so unexpected, wakened me to a higher sense of my own capabilities; or rather gave sanction to emotions of ambition for a higher sphere of intellectual

life, of which I was conscious, although I feared that they originated in conceit, and not in capacity.

The windows of the class-room in North Bridge Street, east side, looked on the Calton Hill, and I saw there the monument of David Hume, the historian. In my sincere and stern orthodoxy it gave me pain, and often I thought—"What a bitter mockery to raise a monument in honour of a man whose soul is now expiating its errors in Hell!"

One evil attended these lessons. The office hours were from 10 A.M. to 4 P.M. ; my class-hour was from 5 to 6 P.M., and the office again claimed me from 6 till 8, 9, or 10 o'clock, according to the pressure of business. There was, therefore, no time for digesting dinner, and none for exercise ; but the latter was partially supplied by walking to execute messages, on which I was frequently sent.

END OF THE AUTOBIOGRAPHY.

CHAPTER V.

1804-1815.—APPRENTICESHIP—STUDIES—DEVELOPMENT OF CHARACTER—PETER COUPER, W. S.—LITERARY AND POLITICAL INFLUENCES—FIRST THOUGHTS OF WRITING A BOOK—SELF-EXAMINATION—PROSPECTS IN LIFE—RELIGIOUS SENTIMENTS—GRATITUDE TO GOD—GOOD FOR EVIL—FEAR OF DEATH—SELF-CONTROL—CONDUCT IN PRIVATE LIFE—ESSAY ON LAW AND LAWYERS—“THE FORUM”—BEGINNING BUSINESS—ECONOMY—EXCURSIONS TO ST ANDREWS AND THE TROSSACHS—PRICES OF PROVISIONS IN 1812—ROBERT COX, GORGIE MILL—DEATH OF GEORGE COMB, SENIOR.

DURING the years 1804-10 George Combe steadily applied himself to the acquirement of the details of his profession in the office of Higgins and Dallas. The chief part of his leisure hours he devoted to the improvement of his education, especially in French and a knowledge of general literature. It was his habit to correspond with his sisters and with several friends in French, in order to advance his own and their command of that language. He freely criticised the efforts of his correspondents, and courted their criticisms in return. In these exercises he was still occasionally assisted by George Hogarth. He continued long to direct the studies of his brothers and sisters, and he took the interest of an enthusiastic teacher in their progress. He scolded them gravely when they blundered, commended them when they succeeded, and constantly urged them to new exertions in cultivating their minds. He became the chief counsellor and guide of the family, not only in matters of education, but also in business. When his brother Andrew refused, with a explanation, to begin his

apprenticeship in the surgery of Mr Johnston on the day appointed, it was George who reasoned with the refractory lad, and who obtained their father's consent to the arrangement that Andrew should not be desired to continue the study of medicine if after one day's trial he should dislike it. The trial was made, and the result proved greatly to the advantage of the world.*

George Combe was sixteen when he entered the office of Higgins and Dallas; he was twenty-two when he left it. During those six years he studied and worked hard, eager to acquire knowledge, and eager to prepare himself for advancement in the future. As a child he had dreamed of doing something which should distinguish him in the eyes of his fellow-men; as a youth all his energies were given to the effort to place himself in a position to attain that distinction. Earnestness was the keynote of his character; life and its duties were always serious subjects to him. He was earnest in trifles as well as in matters of importance, for duty was to him a religion and a law. Whatever he ought to do, that he would do, no matter how much he might scarify his own flesh or that of his friends. He dealt with himself strictly, and felt justified in dealing with others in the same spirit; but he was always ready to make allowance for the common weakness of humanity. In after years, when the great benevolence of his nature was developed by experience and observation, he made the largest allowance for human frailty, and regarded crime as a misfortune to the individual as well as to society. In those early days, however, he was somewhat severe in his judgment of any follies to which he might be tempted, and equally severe in his regard of the follies which he saw others commit. He recognised the virtue of social amusement in the formation of character, and in the maintenance of a healthy condition of body and mind; but he did not permit himself much

* *Life and Correspondence of Andrew Combe, M.D.*, by George Combe, p. 17.

relaxation. Writing to a friend in Glasgow (James Chapman, 1810), he says: "Idleness, love, and business are formidable enemies to study. I have conquered love, and I fight unceasingly against idleness. But I doubt if we should congratulate ourselves on escaping the influence of women's eyes." He had tender impulses, but he restrained them, and resolutely adhered to the rule of conduct he had adopted. A rigorous self-command, in great and little things, characterised him through life.

He attended the lectures on conveyancing delivered under authority of the Society of Writers to the Signet in 1806; and he went through the usual course of study of Scotch Law at the Edinburgh University in the sessions of 1808-10. In May of the latter year his apprenticeship was completed. He had served in every department of the firm; and during the last two sessions he had been intrusted with the management of the Parliament House business. He had displayed the essential qualities of a lawyer—care, diligence, and shrewdness; and he had earned the respect of his employers. His constitutional weakness was overcome by his ambition, which quickened his energy, and enabled him to accomplish much more than stronger men. His apprenticeship ended, he resolved to be something more than a mere clerk. Consequently he sought a situation in which he would have the prospect of a partnership, or have opportunities to form a connection of his own. At the instigation of a friend he applied to Mr Peter Couper, W.S., with whom he concluded an arrangement on advantageous terms. He was paid a small sum as general assistant, a commission on the number of cases he conducted through the Courts, and at the same time he was permitted to accept whatever business might be offered to him privately. Writing on March 3, 1854, Mr Combe says—

"Last night, at twelve o'clock, Mr Peter Couper, W.S., died in his daughter's house, Union Street. In January 1810, I entered his office as a clerk, and acted in that capacity for

about three years. He was very kind to me; allowed me to carry on business for my own benefit in his name; and to drop his service gradually as my own business increased. He subsequently became security for me to the Royal Bank of Scotland, along with other friends, for £400 of a cash credit account, a great aid to a young man without capital. At that time he was understood to have £600 of feu-duties and house-rents from 'Couper Street,' North Leith, inherited from his father; and his business would yield him about £600 per annum more. He was therefore in easy circumstances; and he had then just married a pretty and clever young lady, Miss Mary Richardson, a cousin of Sir John Richardson, who accompanied Franklin in his first Arctic Expedition. He was of a sanguine, easy, social disposition, and reputed clever; and altogether was then a happy, prosperous man. His wife died in 1824, leaving him a large young family, whom he brought up indulgently."

In 1825 Mr Couper fell into difficulties. It was the year of a commercial crisis, which ruined many people. Combe was then able to prove his gratitude, and to repay the kindness shown him when kindness was most valuable. To the end he was faithful to his old master, and continued to assist him in many ways.

The literary and political impulse given to the youth of Britain by the publication of the "Edinburgh Review" strongly affected George Combe. Naturally inclined towards broad, liberal, and unconventional views of life and politics, he was attracted by the daring spirit of the Jeffrey group, and, from the beginning, followed their work with deep interest. He was also influenced by the writings of William Cobbet, who was at that time characterised by Jeremy Bentham as "a man filled with *odium humani generis*. His malevolence and lying are beyond anything." But Combe admired his courage in exposing abuses, although he could not always admire the

manner in which he exposed them. He was a regular reader of the "Weekly Register," and member of a Cobbet Club. One of his companions almost turned the heads of the quiet people at Craigend, near Stirling, by attempting to start a Cobbet Club there in 1809, and Combe aided him by supplying copies of the "Register." This active interest in literature and the events of the day gradually gave definite shape to the dream of his childhood, that he might do something to earn the respect of the world. He began to keep a diary towards the end of 1811, and among the first entries he writes: "A desire of fame may be one mark of a mind that deserves it.

"I have taken the imagination that I have powers of mind sufficient to write some useful book on human nature, and especially on the education and intellectual state of the middle ranks of society; but ever and anon I am troubled with misgivings, and make comparison of my own powers with those of others,—my companions, who do not conceive such design, and authors who have executed such a purpose,—and I feel the conclusion always against myself. Hope, or rather desire, however, still rises, and leads me to imagine that I may be able to do something. This is certainly a strange fancy, and one which would undoubtedly bring contempt and ridicule upon me were I to communicate it to the little world in which I am known. Do I *deserve* contempt and ridicule for entertaining it? I hope not. But my acquaintances, then, must either judge wrongly of me were they to treat me with ridicule, or they must not know me so well as I do myself. The last I generally suspect to be the case; for either my vanity deceives me egregiously, or I am possessed of talents above the common portion that falls to people in my circumstances, and this I believe is not supposed to be the case by any one but myself. Of this, however, I suspect I am no judge; for no man who really esteems me would tell me that he thought me a clever fellow; and thus I must be content to remain ignorant of the opinion of my talents entertained by

others. This ignorance, I may console myself, is not much to be lamented ; for although all my acquaintances were, from the bottom of their hearts to assure me that I am no more than an ordinary minded man, and utterly unfit to amuse or instruct the world by writing, I would not feel convinced by their declaration, and in quietness abandon the idea ; but would impute their conviction to ignorance or prejudice, and feel my desire of writing only increased by irritation, and inflamed by the new desire of showing them, by an appeal to other judges, who, I would hope, would be more impartial than they. What then am I to do ? Overcome and extinguish vanity if possible, and make this book my confidant. Indeed, vanity I feel to be a feature of my mind, strongest in its weak state."

This kind of self-examination was a habit of his, and the thoroughness with which he laid bare his nature was in itself some justification of his ambition. He was sometimes thought to be stern in his judgment of others ; but he was most severe in his judgment of himself. His feelings of buoyant aspiration were alternated with those of despondency ; and he had no sooner set down the hopeful view of himself given above than he felt bitterly repentant for "being guilty of contemptible affectation in entertaining such thoughts. I regard myself as a weak, little man, and feel as if every one I see were looking into me and beholding my nakedness." In a calmer humour he surveyed his prospects in life.

"*Saturday, 23d November 1811.*—When I began my apprenticeship I looked forward to a life of laborious drudgery, and to difficulties arising from every quarter to depress me ; from my being as I then thought a low man among great ; from my wanting friends to countenance and support me ; from my want of confidence to push my way ; and so far was I from thinking of overcoming these difficulties, that I never thought of a struggle against them, but contentedly made up my mind to avoid them by courting obscurity in the character of a clerk,

hoping that, by great assiduity and long service, I might at some distant period of my life make myself so necessary to some master as to be assumed as a partner, and thus become of some consequence and respectability. These were my notions for a very considerable time, and it has been experience alone that has altered them. I first found that I was no low man in the proper sense of that word—that is, that as my parents were respectable, and my own ideas in point of moral integrity and honour high, the idea of lowness was not applicable to me. I next found that by the ability I possessed I could command some consideration, and that with it and experience, I could act in most cases without difficulty for myself. Then I saw that, though I had no great friends, I had respectable ones, who had frequent occasion for the assistance of a writer. Thus my ideas enlarged by degrees, my actual rising, however, always producing their extension, till now I am near being admitted Writer to the Signet, giving up all employment as a clerk, except keeping Mr Couper's books, doing business for myself, and setting up house. My present views are as follows:—I expect by attention, moderation, and my manner of acting, keeping integrity, honour, and the fear of God always before my eyes, to acquire a moderate share of employment, which, in the course of years, I suppose may yield me three or four hundred pounds a year, or scarcely so much, and to be looked on as a respectable writer of the middle class. As to my expectations of happiness from an increase of wealth, I hope to have it more in my power to do good; but this hope is diminished by the fear that then I, like others, may not be so inclined.

“I do not expect to live long, though I eagerly desire I may. I am now about a month past twenty-three years of age.”

The weak state of his health towards the close of 1811 frequently interrupted his studies. Close application of any kind speedily produced confusion of ideas, weakness and

dulness of mind and body ; and he was much distressed by his inability to fix his attention for any length of time upon one subject. This was due to the severe tax which he placed upon his constitution—at no time strong—by the variety of studies in which he engaged. He was preparing for his public trials as Writer to the Signet, and was also busy with Latin, in which he found himself sadly deficient. He rose at seven o'clock in the morning, and occupied the whole day till nine at night—"without doing a great deal either," he says regretfully. But another illness compelled him to own that he was attempting too much, and with that wise observance of the laws of the constitution which afterwards produced the "Constitution of Man," he reduced the number of his studies, and did not rise till after eight in the morning. He did not fear his forthcoming examination, for he regarded it as very much a matter of form, and knew that he would pass easily ; but he did fear sluggishness in himself, and dreaded the possibility of making weakness an excuse for idleness. "I am thinking of becoming a member of the Juridical Society. I am of a melancholy, inactive disposition, never exerting myself but through necessity, although I find myself always the better of activity ; and I am in hopes that by joining the society I might be forced to action and amusement by the incitements of emulation and the thirst of honour."

He regularly attended the West Church, and it was his custom at home to occupy the Sunday afternoon in writing an abstract of the sermons preached by Sir Harry Moncrieff and others. This was a sort of religious exercise which he had imposed on himself, and when he sometimes found that, from the weakness referred to, he was unable to pursue the task, he was troubled. Religion obtained a large share of his thoughts ; and from childhood to the close of his life his religious sentiments were deep and earnest. But in religion, as in dealing with his own character, he was honest : he would allow no self-deception. When he doubted he expressed the doubt,

and sought the truth with all his strength. Forms and creeds raised doubts in his mind, but religion, which should help and guide mankind, was always beautiful and divine in his eyes. He never failed to express his gratitude to God for the many blessings vouchsafed to him; and he accepted misfortune with resignation, attributing it to some failure of duty or reason on his own part. The devout spirit apparent in all his actions and thoughts is an important element of his character, and should be kept distinctly in view. Many good people long regarded George Combe as a rank atheist,—a companion fit only for Tom Paine,—and his teaching as most perilous to morality. The contrary is the truth. He was earnest in religion, as in everything else; but he dared to question forms, and he consequently shocked those who regarded forms of worship as the most essential part of religion. The following passage occurs amongst his first written meditations on the subject:—

“*Sunday, 10th Nov. 1811.*—I have been thinking of myself as a creature of the Almighty God, and that I owe to Him existence, began and continued; and all the comforts and enjoyments of life, which certainly are good. My heart or my reason tells me that I should feel warm gratitude for these gifts, and should look upon the withdrawing of them, especially of that of existence, as the most terrible evil that imagination can paint. I, however, have not this warmth of gratitude—that is, I do not feel my heart at this moment springing in exultation to my Creator for my being. Yes, I do! My heart beats praise to God for having created me; I sing joyfully, thanks! thanks! most generous Being for thy unbounded goodness! Now, though I feel some slight ills, this scene will pass away, and in the boundless ages of eternity my soul will know what pleasure is.

“Strange, strange being that I am: when I began to write, my feelings were dull, and I accused myself of unnatural hardness of heart. As the subject came flowing on my soul, its energies

awoke, and, by a sudden spring, it stopped the sentence reason was about to pronounce against it. Its effort, however, was feeble, and more like a struggle than voluntary motion. Dulness, feebleness, and insensibility have again beset me; and my only consolation is, that when my soul shall break its prison walls and leave its weak companion here below, it will prove itself alive to every gift of God. Till then! till then!

“This forenoon Sir Harry Moncrieff lectured on the First Epistle of Peter, chapter iii., from verse 8 to the end. His lecture was exceedingly good on the first ten of these verses; but the remaining ones, from verse 18 to 22, cost him much labour and to little purpose. . . . The first part of the lecture, however, was in a different style. He defined, in a very sensible manner, the circumstances in which we are not to render evil for evil, or railing for railing, but contrariwise, blessing. This doctrine, on which Christians pride themselves so much, I have heard ridiculed as inapplicable to human life, inasmuch as it would make him who practised it the object of malignant passions to the base and unprincipled, and of contempt to the wise and virtuous. This I must own in many cases would, in my opinion, be the consequence of practising the above doctrine; but these cases are those of weak-minded men, having many failings to make them, at least, not respected; and who practise the doctrine because they are enjoined to do so, and not because they see the propriety of it themselves. In men of an opposite character, great, commanding souls, nothing exalts them to a higher pitch of true greatness than the practice of this doctrine. Their look in returning good for evil, their manner, awfully reprimanding vice, while they show it beneath them to allow it to ruffle their souls or to stir up the little passions, are the severest rebuke that wickedness can receive. This is exemplified in Addison’s ‘Cato’ in many scenes; and the overwhelming effect of virtue, accompanied with dignity, is exquisitely exhibited in Satan’s feeling

abashed by the following reproof from the angel who discovered him in Paradise :—

‘ So spake the cherub ; and his grave rebuke,
Severe in youthful beauty, added grace
Invincible : abashed the Devil stood,
And felt how awful goodness is, and saw
Virtue in her shape how lovely ! saw, and pin’d
His loss.’

Milton, Book iv. line 844.

“ This precept, however, it may be said, is still liable to great objections, if it be practicable only by great minds ; for the bulk of mankind are not possessed of great minds.

“ *Tuesday, 12th Nov. 1811.*—I am much better to-day. My head is settled, and my mind easy ; but my power of attention is not strong. One observation is worth recording ; that though my head was in a very bad state yesterday, and such as would have warranted—at least excused—dismal forebodings, yet I felt none. The thought of death never obtruded itself ; and when it was called up in my mind was not at all uncomfortable. This led me into various reflections on the fear of death ; and the conclusion I came to was that the mind, in so far as regarded that fear, was very much under the influence of the body ; and that in many cases it was no evidence either of a weak mind, or of an uneasy conscience that the thoughts of death were terrifying ; nor of a strong mind or upright life that these thoughts were not attended with dismay, but rather that these different feelings arose from the abundance or scarcity of animal spirits, which depend almost entirely on the state of the body. From this view I do not conclude that guilt has no effect in making death terrible ; but only that in the cases of ordinary men, who have not committed flagrant crimes, the fear of death depends much on the state of the animal spirits. I myself am an example of the correctness of this doctrine ; and I have many other proofs in my mind, drawn from observation of persons of my acquaintance who have died of different diseases—such as consumption, dropsy, decline, &c.”

He observed with remarkable care—considering that he had no special object in view at this time—the various changes of his mental condition. His complaint that his mind was sluggish has been already mentioned; but with the increase of his business, and the increase of objects for exertion, he found himself subject to a state of nervous excitement in which the brain was only too active. He detected himself working fast, reading, talking, and walking fast; and found that he was impatient with others in the common details of daily life. Thereupon he determined to correct this excitability by doing everything with deliberate slowness. He took a walk, and measured his steps to the time of a dead march, in spite of much eagerness to quicken his pace. So with other things: recognising the advantage of self-control, he set himself to obtain command of his thoughts and actions, and he succeeded as well as it is possible for a man to succeed in such an object. He had distinct views as to the regulation of conduct in private life. He says:

“In the middle class of society, and, indeed, in all who do not make the regulation of their minds their study, much misery is created, at least much happiness is excluded by the peevishness, hastiness, and ill-nature with which the members of a family speak to one another. A request is made in a tone of voice which indicates that a denial is expected, and shows preparation to receive and return a burst of ill-humour. Commands are given in a high-strained tone, so that the person commanded feels an impression of compulsion arising in his mind, against which he naturally opposes obstinacy and backwardness; and thus without the one party or the other thinking of the thing to be done, a struggle of ill-nature takes place, and one seeks to compel and the other will not be compelled. It is not laziness or unwillingness to oblige that is the cause of such commands being disregarded or resisted: it is the impression of tyranny or senseless affectation of authority in the manner of commanding. These instances are taken from real life, from the relation of parents and children. The remedy

for these evils is the acquiring a thinking habit of mind, in which the attention is always kept awake, and watching over every word and action, that it be proper in itself and properly uttered or done. In persons who have long been accustomed to allow their minds to run according to the impulse of the moment, the acquisition of such a habit may be difficult ; but slowness of speaking and acting, which allow the mind to follow, will soon surmount that difficulty."

Whilst busy with his legal studies he wrote numerous essays on a variety of subjects. He aspired to write for the "Edinburgh Magazine" as a test of his strength, still keeping in view the cherished object of producing a book, all his own. The paper which he sketched out was on "The Evils of the Law and the Sources from which they Arise." The subject was suggested by events which occurred at the funeral of Lord President Blair. He was amongst the crowd, and as the troupes of lawyers filed past, he heard the bystanders exclaim : "See such a vermin ! Lord pity the country that has to support such a crew !" His sympathies were naturally with his professional brethren, and the purpose of his essay was to show that, although much maligned, lawyers were as a class as honest as any other. About the same time he was taking part in the debates of a society of young men who met under the title of the "Forum." The meetings of the "Forum" were held in St Mary's Hall, Cowgate, and sometimes at St Cecilia's Hall. Essays were read by the members, and discussion followed upon the subject of the essays. The result was determined by the votes of the meeting, which frequently numbered two or three hundred persons, including the members and their visitors. Mr James Hay, Leith, one of the very few survivors of the society (1876), remembers the Ettrick Shepherd speaking at the meetings about 1811-12, and that must have been on the occasions when he was in Edinburgh selling sheep and arranging for the publication of his poems. There was a very crowded gathering on the occasion of a discussion on the relative

advantages of marriage and celibacy. The meeting, by a large majority, decided in favour of matrimony. The question as to whether the punishment of death might be justifiably enforced for other crimes than that of murder did not attract such a large audience; but it is worth noting that the decision was against the infliction of capital punishment for any other crime than that of murder. Combe dissented from this view, believing that there were other crimes than murder which under certain circumstances merited the last penalty of the law. Again, whilst the novels of Richardson, Fielding, Smollett, and Henry Mackenzie were the chief fictions of the day, and just before the "Waverley" series commenced, the "Forum" discussed the question, "Whether novel-reading is favourable or prejudicial to morality?" and decided that it was prejudicial. Upon this Combe remarks: "The speakers were all very young, and appeared to have no idea of reasoning from principles and in connection so as to induce conviction, but confined their efforts to allegations and declamations. I was unable to form an opinion from any information I received there, and, as I had never thought on the subject, I gave no opinion at all."

On the 31st January 1812 he passed his examination, which lasted twenty minutes, and was admitted Writer to the Signet. Immediately afterwards he took a house in Bank Street, and began business on his own account; although for a short period he continued his business relations with Mr Couper. His income at this period he calculated at £130. His brother Andrew resided with him whilst attending Mr Johnstone's surgery and the medical classes; and for his board he was to receive £2 a year. This income, he thought, with economy, should do. His sister Jean was the housekeeper. He had expected his brother Abram to join him in the house; but Abram was about to be married, and therefore required a house for himself. George was pleased to be at the head of a household, and he conducted it with economy and comfort. There was good sense in the measures which he adopted. Formerly he had not

hesitated to spend three or four shillings in going to the play or treating friends at a tavern. Now he calculated how much comfort small sums might procure at home, and therefore regarded them as of some importance. The sum of three shillings "will provide a plain dinner for the whole family. It will furnish me the materials for a good bowl of toddy for my friends. It will provide a neat small roast of beef for a stranger. These considerations make me care less for the playhouse or the tavern." At the same time he had a horror of anything approaching to meanness; he was always eager to give the best he could afford to his friends; but he considered what he could afford, and acted accordingly. His own tastes were very simple; and at this time he had, with benefit to his health, adopted a system of vegetable diet. "I take porridge to breakfast; broth and bread, and an egg, or rice and milk to dinner; tea; and buttermilk and bread to supper."

He sent out circulars to all his friends soliciting employment; and as the family connections were numerous he soon had a good deal to do in arranging leases, collecting rents, &c. He obtained a loan from George Comb, of Redheugh, to assist him in carrying on his business; and he was now fairly started on the road which, with his talent, shrewdness, and industry, led him to a comfortable competence at an age when he was able to appreciate and enjoy it. His reputation as a man of business grew steadily; and in a few years he found his position secured, and his clients still increasing in number. At this time he says his family consisted of—"My father, aged sixty-seven; my mother, aged fifty-five; my brothers—John, a brewer; Abram, a tanner; William, a baker; Walter, a currier; Andrew, to be a surgeon; James, a tanner with Abram. My sisters—Barbara, married to George Young, at present overseer of coal weights; Ann, married to Robert Cox, leather-dresser, Gorgie Mill; Jean, Margaret, and Beatrix. If I live to read this twenty years hence what a breach death will have made!"

He made two excursions this year (1812), and it is interest in

to learn that the traveller of sixty years ago had the same complaint to make as the traveller of the present time in regard to hotel-keepers. At St Andrews he found the town "dull and decaying," and the inn accommodation wretched. At the Trossachs he had to encounter not only wretched accommodation but "extortion and insult" besides. These journeys were performed for the most part on foot; the stage coach and sailing boat were only used when fatigue or necessity required their assistance. Travelling by Dumbarton, Lochlomond,—ascending Ben Lomond on the way,—to the Trossachs was then a serious undertaking, and only the hardiest young men of the day attempted such an enterprise. Combe made up in spirit for what he lacked in physical strength, and so just after the publication of the "Lady of the Lake" (1810) he visited the chief scenes described in the poem.

The war on the Continent was a subject of serious anxiety to citizens of all degrees, and the victory of Wellington at Salamanca was hailed with much satisfaction. Provisions were exceedingly high, and the poorer classes suffered great privation. Old wheat brought 80s. to 86s. a boll; oats and barley, 50s.; the quartern loaf was 1s. 7d.; and meal s. 5d. per peck. The harvest, however, proved abundant, and new wheat sold at 70s., and soon fell to 60s. a boll. Potatoes were 10d. a peck. Water was sold in the streets at 3d. per "stoup" (a pail); carts, with large barrels full of water, being driven about, the owners retailing it as the dairymen did buttermilk. This state of matters made housekeeping a serious business for a young man just commencing life. But Combe's health was improving; his business increasing; he had simple and good fare; he avoided "show," and made his friends—and he had many—comfortable. He felt happy in his new position, and gave thanks to God for his blessings, which he prayed that he might be able to use properly. He found pleasure in his profession, in his social surroundings, and in his studies. He was busy reading history; and attending lectures on geography

as applied to history. He devoted some time to chemistry, and became a member of Dr Murray's class. He also became a student of anatomy and physiology under Dr John Barclay, then the most esteemed teacher of these sciences in Edinburgh. The latter studies came to be of especial value to him a few years afterwards, when he was attracted to the subject of phrenology. Notwithstanding the number and variety of his occupations he found time to write verses and to take interest in the love affairs of his friends. His brother Abram having been disappointed in a "first love," speedily consoled himself by marrying Agnes Dawson, the daughter of a leather merchant in Dalkeith, and the union proved a happy one. His cousin, Janet Comb, Redheughs, became the wife of John Rennie, farmer, Castletown, near Dunbar. For this cousin Combe had entertained very kindly feelings, although he could not believe they were those of love. He owned that he was decidedly partial to the married state. Nature pointed it out as the condition most suitable to human happiness. But he would never marry—at any rate not for twenty-five or thirty-years to come, if he should live so long. Here, as everywhere else, the thought of death was often in his mind; but the prospect of the immortality of the soul brightened the thought and relieved it of all terrors.

With death he was brought into frequent contact; and it seemed as if the breach he had anticipated in the family roll were to be made a large one and quickly. In February 1814 his brother Walter, aged eighteen, died of consumption. About the same time the serious illness of Mr Robert Cox, Gorgie Mill, caused much anxiety to the family; he recovered, and was apparently quite well for a few months. But there came a relapse, and he died on the 22d January 1815, aged forty-two. The career and character of Mr Cox are full of interest, and present an example of the power of industry, talent, and good heart, which should be recorded. Born to no inheritance, educated with few advantages, he acquired, whilst still a young

man, a considerable fortune. He lost his father early, and had to work for himself. He was fond of books; one of his first investments was "Ferguson's Lectures on Mechanics and Astronomy," and he worked for candles with which to read it. From that time he went on as best he could procuring books and acquiring knowledge. By the energy of his mind he soon raised himself to easy circumstances, and he continued to prosper to the too early end of his useful life. Describing him, Combe says (1814):—

"His manner is not inviting to a stranger; but on a close friendship you discover a strong and reasoning mind; active and intelligent; and there is not a better heart in the breast of man. To my certain knowledge several respectable individuals owe their standing in trade to his kind and entirely disinterested support when difficulties were like to overwhelm them. He helped them from pure goodness, for they had not assisted him, and were not likely to have an opportunity of doing so. He had not dealt with them, and so had no profit to expect; and it was not vanity that influenced him, for his benevolence was heard of only from those whom he had benefited.

"The most afflicting event which I have ever recorded here, happened yesterday (Sunday, 22d January 1815), namely the death of Mr Robert Cox. His disease was now ascertained to be water on the chest (hydrothorax). I sat up with him from Saturday night to Sunday morning; his brother James slept on a sofa in the room; and his wife slept in bed with him with her clothes on. During the night he gave little trouble; but his feet were cold, and we applied warm flannel to them; and while doing so Mr Cox said: 'I don't feel them cold. I am dying at the extremities already.' Several times the warm flannel was replaced and he repeated the observation, saying—'My hands are cold also, which is another sign of death.' At half-past seven on Sunday morning he desired us to assist him out of bed. We did so, and when seated, he said (his wife, brother, and I being with him): 'I have not long to live; I wish to give you directions about my affairs.' He then told us how he wished things settled, and I proposed to write it down. He desired me to do so. I suggested that he should indorse the bills which were in the drawer. He said that was well minded, for his doing so would save us

much trouble. He then sat in to the table and indorsed about twenty-six bills as steadily as ever he did in health. He then said—‘I shall give you an order for £50, put into the Bank of Scotland by mistake, which will also save you much trouble.’ Sitting in the easy chair, he wrote an order for £50, holding the paper on the board of a book; and, although his hand was a little unsteady, he did it well. I then wrote a trust-deed and tack of Gorgie Mill betwixt his brother and himself, and these, being first read, he signed with great steadiness. He said—‘I am satisfied. I am not afraid to die, and do not complain.’

“In the course of the forenoon, he said—‘I am wearing fast away; I shall soon see the other world; we know nothing about it, notwithstanding all that poets and divines have written of it. I am not afraid to go to it; for I have experienced so much of God’s goodness here, and know that the same goodness which governs this world must be present also in the next, that I trust myself with perfect confidence to God wherever he chooses to take me.’ About four o’clock, lying in bed, he said—‘I am wearing awa, Jean,’ quoting from the song. About this time he signed a nomination of tutors. About six o’clock he expressed a wish to rise and be placed in the easy chair. We remonstrated that his strength would not permit, but he said it would. With much difficulty we got him out of bed and placed in the chair. He desired his wife to put on his stockings, and, looking at his legs, he said—‘They are dead already.’ He asked something to drink, saying—‘Give me something to comfort my heart.’ He took some beef-tea with bread in it. I then went up stairs to tea, leaving his brother and wife with him. In a few minutes he sent up a message for his eldest daughter Marion (she is nearly twelve years of age) and me to come and speak with him. His mother, my mother, and my sister Jean followed us. He was still sitting in the easy chair by the fire, and said—‘Marion, come here.’ She went up before him. He stretched out his hand and took hers in his, and with a look of complete composure and in a firm tone said—‘Marion, I am to die this night. I leave you to the charge of your mother, your grandmother, your uncle James, and your uncle George. They will instruct you how you are to conduct yourself in future life, and you will attend to them as you have done to me, for they have my highest consideration. I recommend to you virtuous conduct and the fear of God as the only ways to happiness and respectability, and by following which you will not fear to die. I leave you as much money as will keep you comfortable in a

moderate way, but it is not riches which make happiness. I give you my parting blessing, and hope you will not forget what I have now said to you.' He then shook her tenderly by the hand, and she retired. My mother approached him. He took her also by the hand, and said—'Mrs Combe, I esteem you as an excellent woman, and thank you for the wife you have given me. She has been the comfort of my life, and I now leave her to you, and hope that God in His good providence will watch over you and her while you continue in this world.' My sister Jean approached; he took her hand—'Miss Jean, you have my highest consideration as a most valuable and intelligent woman. I commend to you the fear of God and the practice of virtue as the paths to happiness; and beg of you to add your instructions to those of my mother, my wife, and James, and George in leading Marion and my other children to follow your example, and walk in the ways that I would wish them. You have my best wishes and blessings for your future happiness and welfare.' His mother approached, and he said—'Mother, I am about to leave you, and I express my satisfaction with the manner in which you have brought me up, and my thanks for your kindness. You brought me up in the nurture, fear, and admonition of the Lord; and I have endeavoured to walk therein. I now leave you my children; and while you are spared on earth, do to them as you have done to me. Teach them uprightness of heart and the fear of God, and tell them they have my blessing. May the God whom you taught me to fear be with you.'

"His wife then drew near. He took her hand, and said—'Anna, I must leave you. I cannot tell you my sense of your merits. I leave you our children. Teach them to live as we have done, in life's middle way, which I have found a pleasant road. Teach them honesty and worth, and not to be led away by the glare of the world. May God bless them.' I drew near, and he pressed my hand with all his remaining strength—'George, you have my esteem as an honest and worthy man; and considering you as such I have left you the charge of my children. I hope you will discharge the trust I have committed to you like yourself, and that you will continue to walk in the paths of honour and integrity; let no low trick ever disgrace your life. May God give you happiness and prosperity.' He pressed my hand tenderly three or four times, and I returned the pressure. It was the only return I could make. During all this time we were in tears; but no tear was in his eye; no faltering on his tongue; but all was dignity, firmness, and composure.

“He placed his head back on the chair, put his finger on the artery of his arm, and feeling his pulse low, he said—‘I will soon go.’ He put his hand on his face, and said to me—‘George, is not my countenance fallen, and my lips white?’ I answered they were not such as I had seen them, but they were not much fallen either. He felt his nose, and said—‘Dear me! I am dead in the extremities already, for my nose is cold, sitting before that good fire.’ His wife proposed to send for his eldest son John, who was a boarder with Mr Cooper at Dalmeny, about seven miles distant, that he might receive his parting blessing. He said—‘Do not send for him, for I shall be dead before he be half-way here.’ His wife said—‘I would like him to receive your blessing from your own lips.’ He answered ‘Now, that is superstitious; I leave him my blessing, and I pray that God may bless him, but I tell you that I cannot live to see him.’ He then attempted to lay himself back on the chair, and felt how the balance of his body would direct his fall when he expired. He desired us to remove a pillow which was behind him, that he might lie fairly backwards. He again put his finger on his wrist, and said—‘I have no pulse.’ He sat for some time feeling the artery, with great composure. After a little he said—‘I am not easy here; I will lie down on the floor.’ (The bed had deals put to the sides of it to keep in the clothes when Mr Cox’s head was raised to relieve his breathing.) His wife answered—‘Oh, no; I cannot bear to see you on the floor.’ We endeavoured to put the bed on the sofa and support it with chairs, but we found this would not do either. We proposed to cut the sides from the bed, and put him into it. He said—‘You must send for assistance, then; for I can give you no help, and you are not able to lift me,’ meaning his brother and me. We sent for James Graham, his oldest servant. When he came in Mr Cox took him tenderly by the hand, and said—‘James, I return you thanks for the honesty and faithfulness with which you served my father and have served me; continue the same with those I leave behind me. I leave you a free house as long as Gorgie Mill belongs to my heirs, and you shall never want. And your son after you shall never want friends if he be like his father. I give you my last blessing, James.’ We got him placed in the bed with great difficulty, and he was even near expiring in our hands. He was laid too far down on the bed, and asked us to lift him higher. He said—‘I will give you a push.’ He exerted his last effort, and we got him placed in an easy position. He then said—‘That will do.’ In two minutes he breathed

his last without a groan, the hour being now half-past seven P.M.

“This scene was very distressing ; but the calmness of mind displayed by Mr Cox enabled us to bear it better than we otherwise could have done. He spoke with a clearness, readiness, and eloquence of the most astonishing kind ; and no scene written for the stage in which human nature is meant to be represented in its best light could surpass this one in true grandeur. He was scarcely at the prime of life, aged only forty-two ; he had just begun to taste the sweets of independence. He was surrounded by a wife, younger than himself, whom he loved dearly, and six children, all young and engaging. He saw death approach ; he looked him full in the face, and measured his advance by every quarter ; nay, he even watched his steps ; yet no sigh, no complaint, no faltering ; no tear or weakness, though all around were in tears. All was magnanimity, greatness, and resignation. He said, while sitting in the chair—‘I would like to look back and see how you are coming on.’ But this was the only expression that looked like regret at leaving the world.

“The scene was truly valuable to me. Mr Cox and I used often to talk about religion, and our sentiments agreed. He had a reverence for religion, and an awe and love of God ; but he frequently spoke against the doctrines of Calvinism, which send countless millions to eternal misery, and among these some of the worthiest of mankind, while they reserve heaven for a few.”

A few months after the above event the family was again in mourning. Combe’s father, who was then in his seventy-first year, had suffered much distress on account of the dangerous illness of his eldest son, John, the manager of the brewery. John recovered, but the father died suddenly of apoplexy on 29th September 1815. Of his seventeen children eleven survived him. His character is sufficiently indicated in the autobiography ; and it is only necessary to state here that about two years previous to his death he had made his will, appointing his sons John Comb, Abram, and George Combe trustees. The will, after making suitable provision for Mrs Comb, made an equable disposition of the property amongst his children. George Comb, senior, did not write his name with the final “e” ; but in an old lease, granted to one of his

forefathers in 1742, the "e" is used, and the family, with the exception of John, re-adopted it. His children remembered him with loving respect; and in a letter addressed to George, Dr Andrew Combe recalls affectionately their father's habit of applying epithets to them in a half-earnest, half-jesting way. One was called "Abram, the rascal," because he had a good deal of comic humour, and was fond of playing tricks on his brothers and sisters; while George and Andrew were distinguished as "blockheads."

CHAPTER VI.

1815-1818.—PHILOSOPHY OF THE MIND—THE EDINBURGH REVIEW—SPURZHEIM IN EDINBURGH—HOW COMBE BECAME A PHRENOLOGIST—HIS FIRST OBSERVATIONS—ALARM OF FRIENDS—SUCCESS—HIS BUSINESS LIFE—FIRST ESSAY IN THE SCOTS MAGAZINE—A TOUR—BRIGHTON SIXTY YEARS AGO—JOURNEY TO PARIS—METZ—FRENCH ROADS AND DILIGENCE TRAVELLING—NAPOLEON—THE ROYAL FAMILY OF FRANCE—WATERLOO—SIR G. S. MACKENZIE—EDINBURGH IN 1818—ANATOMY OF THE BRAIN.

THE philosophy of the human mind became at an early age the most interesting study to Combe. Whilst still a youth he read the works of Locke, Francis Hutcheson, Adam Smith, David Hume, Dr Reid, and Dugald Stewart. But he failed at first to understand them; and was baffled in his efforts to apply their principles to the explanation of the phenomena of active life. Then with much mortification he renounced the study of metaphysics for several years as one which surpassed his powers of comprehension. Still he was haunted by a strong desire to penetrate more deeply into the well-springs of human action, and in the hope of learning something about the mind by studying the structure and functions of the body which it inhabits, he became a pupil of Dr John Barclay. He was profoundly interested in his expositions of the structure, functions, and relations of the different parts of the human frame; and he was never more deeply impressed by the conviction of the power, wisdom, and goodness of the Creator than he was by the revelations made to him in those lectures on anatomy and physiology. When Dr Barclay began to dissect

the brain, Combe gave his keenest attention to the lecturer. He sat for four hours in eager expectation, and saw part after part of the brain exhibited, named, and cut away. He waited for an explanation of the functions, and was disappointed. The long lecture concluded, he says, with the professor's frank acknowledgment that all he had been communicating "amounted to nothing more than a display of parts of the brain in the order of an arbitrary dissection; and that in simple truth, nothing was known concerning the relation of the structure which he had exhibited and the functions of the mind. I then abandoned the philosophy of mind in absolute despair, as a mystery too profound to be penetrated by human intelligence."

The number of the *Edinburgh Review* for June 1815 contained a long article on "the Doctrines of Gall and Spurzheim." The author was Dr John Gordon, a private lecturer on anatomy and physiology in Edinburgh, who had published a few years previously a work on "The Structure of the Brain, comprising an estimate of the claims of Drs Gall and Spurzheim." He had also written the review of a "Letter from Charles Villers to Georges Cuvier, on a New Theory of the Brain as the immediate Organ of the Intellectual and Moral Faculties; by Dr Gall," which appeared in the *Edinburgh* in April 1803. He had followed up the subject; he was a skilful and vigorous opponent of the system of phrenology; and now in 1815 he seemed to gather all his powers into one effort to extinguish forever the "man of skulls," as he contemptuously styled the founder of the new science. Satire, ridicule, fierce and sometimes coarse invectives, were employed against the unlucky phrenologists; wherever there was a hole to be picked in their argument it was picked with thorough relish of the task; and Dr Gordon had the satisfaction of finding many holes. Two brief quotations from the review itself will best show the nature of the article.

"We look upon the whole doctrines taught by these two

modern peripatetics, anatomical, physiological, and physiological, as a piece of *thorough quackery* from beginning to end." The review concluded with these words: "The writings of Drs Gall and Spurzheim have not added one fact to the stock of our knowledge, respecting either the structure or the functions of man; but consist of such a mixture of gross errors, extravagant absurdities, downright misstatements, and unmeaning quotations from Scripture as can leave no doubt, we apprehend, in the minds of honest and intelligent men, as to the real ignorance, the real hypocrisy, and the real empiricism of the authors."

The review was one of those displays of rough vigour which the *Edinburgh* in those days was fond of making. Readers laughed at the jokes and retailed them, were amused by the remorseless drubbing which the quacks received, and forgot altogether to inquire whether or not there were anything to be said on the part of the victims. George Combe, like others, followed the lead of the *Review*, and in his own circle did his best to heap ridicule upon Gall and Spurzheim's pretensions. Spurzheim was lecturing in Dublin when this onslaught was made, and as soon as he had read it he hastened to Edinburgh to meet his censor face to face, or, failing that, to give a course of lectures on the enemy's own ground, which should be a public answer to the attack on the principles of phrenology. Combe laughed at the Quixote, refused to go to hear him, and the first course of lectures in Edinburgh were concluded without his having even seen the man who was to exercise the most powerful influence on his future life.

In the introduction to his lectures in America (Boston, October 1838) Combe gives the following account of his meeting with Spurzheim:—

"It chanced that on leaving the Court of Session one day, a friend of mine, a barrister, said: 'Would you like to see Dr Spurzheim dissect the brain?' My reply was: 'Yes, very much.' 'Then, come to my house to-day at one o'clock.' I went and saw Dr Spurzheim for the first time. He laid the *Edinburgh Review* on the table. Then he proceeded to display the structure of the brain in a manner inexpressibly superior to

that of my late teacher, Dr Barclay; and I saw with my own eyes that the reviewer had shown profound ignorance, and descended to gross misrepresentation in regard to the appearances presented by this organ when dissected by a skilful anatomist. My faith in the reviewer was shaken; and I attended Dr Spurzheim's second course of lectures. At the close of the series I had attained the conviction that the faculties of the mind which he had expounded bore a much greater resemblance to those which I had observed operating in active life, than did those of which I had read in the works of metaphysicians; but I was not convinced that these faculties manifested themselves by particular parts of the brain. Dr Spurzheim himself had told us that this conviction could be reached only by extensive personal observation. All my former interest in the study of mind was now re-awakened. I procured from London a large collection of casts illustrative of the different organs. When they arrived in two large sugar puncheons, were brought forth, and ranged on my drawing-room floor, they looked all so white, and so exactly alike, that I felt ashamed of my own folly; and in my belief that the distinctions between them were too minute for my limited powers of observation ever to discriminate, I would have hid them if I could. But the fact of their arrival had got abroad among my friends, and they came in troops to see them. I was forced to tell them all I knew about the casts—and that at first was very little; but to my own surprise I discovered that at each succeeding explanation which I attempted, the subject grew upon myself. I saw clear and obvious distinctions between casts, which on a hasty and impatient glance had appeared exactly to resemble each other; and by reading and conversation I acquired a greatly extended and much more accurate acquaintance with the mental talents and dispositions of the individuals, the casts of whose heads I had before me, than I had previously possessed. I also examined the heads of many living persons whose characters I knew; and at the end of three years' study I became convinced that Phrenology was true.

“In proportion to the increase of knowledge in my own mind was the interest of my expositions heightened, until at length the applications for an account of the casts became so numerous that I was forced to devote certain days and hours to gratify the public curiosity. Time rolled on, and my expectation that the general interest in the subject would cease was never realized. On the contrary, I was entreated to announce public expositions of Phrenology as the only method of

doing justice to the subject, to the inquirers after truth, and to myself. Thus I became a phrenologist and a lecturer on phrenology by a concatenation of circumstances which were not foreseen by myself, and the ultimate consequences of which I never contemplated when I began the study.

“During all this time I continued to devote myself to the discharge of my professional duties, assiduously and earnestly. I depended solely on my professional success for the means of subsistence, and the only serious trial which presented itself during this progress of events, was the alarm of some of my best friends lest I should ruin myself by espousing a cause which was the laughing-stock of all men of reputation, and which no abilities of mine could ever render triumphant. Don Quixote’s assault upon the wind-mill was regarded as an equal match of strength compared with my venturesome presumption in entering the lists as an author and a lecturer against public opinion, in defence of a doctrine which, it was said, was denounced as a gross delusion by every philosopher in Europe. I was totally without fortune, reputation, or influential connections. It was even said by some that I must have become insane on this subject by constantly dwelling upon it. But these ominous anticipations of ruined fortunes and public condemnation never for a moment disturbed my equanimity. I had now attained a thorough conviction that phrenology was true and important. I felt an instinctive reliance on the justice of mankind, and believed that those who had hitherto befriended me would not desert me unless I should forfeit their confidence by actual neglect of the duties which I owed them. I increased my attention to business in proportion as I knew that it was expected I should neglect it, and I was completely successful.

“I introduce this statement to encourage those who may be at any time intimidated in the pursuit of truth by similar forebodings. If they strive to discharge the duties of their calling with increased diligence, and prove by facts that they are not neglecting their proper business while they are advocating truth, society will not desert them. In humble gratitude to God, and in justice to man, I make the acknowledgment that my own prosperity and happiness increased every day after I had resolved to brave all dangers in defence of phrenology.”

The foregoing passages show that Combe’s enthusiasm as a phrenologist was guided and kept in control by his practical.

shrewdness as a man of business. He was at first slow to be convinced; he had laughed heartily with his brother Andrew at the plates in Spurzheim's "Physiognomical System," and would not read the book; but when the subject was clearly explained to him, and when his own experience proved the truth of his teacher's assertions, he became the resolute advocate of the new science, and soon its chief representative in this country.

Meanwhile his business life, which he contrived to keep clearly defined from his life of philosophical study and aspiration, proceeded satisfactorily. In July 1815 he obtained his commission as Notary Public, which enabled him to extend his practice considerably. His eldest brother, John Comb, who had the management of the brewery at Livingston's Yards, died in April 1816; and George, in conjunction with Abram Combe, undertook to conduct the business for the benefit of the family. In January 1818, George undertook the whole direction of the brewery, and for several years carried it on successfully, notwithstanding his numerous other occupations. He had good administrative capacity, and this, combined with his clear view of circumstances and promptitude of action, ensured success. The multifarious family arrangements and rearrangements which were rendered necessary by successive deaths, and by the alterations of the plans of the survivors, he conducted with legal precision and to the satisfaction of all. It is rare to find such unanimity in large families as existed among the Combes. They were strict in their dealings with each other; they were also generous. George gave the first three guineas he could call his own towards the purchase of a piano for his sisters. When Andrew's health rendered his sojourn in Italy for a time advisable, the family jointly agreed to pay his expenses. When William failed in business and had expended his patrimony, the family jointly agreed to pay his debts in order to spare him the scandal of a public bankruptcy. A keen sense of honour and self-respect characterised the whole family. The spirit of independence which enabled the

father and mother to pass successfully through a period of famine and extreme difficulty was inherited by the children.

The year 1817 was a busy and happy one to Combe. He was at the *inquiring* stage of his study of phrenology; he was constantly testing the principles of the science by the careful observation of the peculiarities of all who surrounded him. He was in frequent communication with Dr Spurzheim, who was then sojourning in London, and seeking from him assistance wherever difficulty arose. In the April number of the *Scots Magazine* he published his first article on phrenology. It was entitled "An Explanation of the Physiognomical System of Drs Gall and Spurzheim." He did not commit himself to any definite views in this essay; it was simply an "explanation," as its title indicated; and in his list of the organs by which the faculties of the human mind were said by Gall and Spurzheim to manifest themselves, he clearly defined those organs, the nature of which had been established by observation from those of which the faculties were still doubtful.* He was naturally anxious about

* It will be interesting to phrenologists to compare the list of organs in the essay alluded to above with the later lists in the works of Combe and Spurzheim. Organs of propensities common to man and animals:—I. Amativeness, and II. Philoprogenitiveness, established by observations; III. Inhabitiveness, conjectural; IV. Adhesiveness, probable; V. Combativeness, VI. Destructiveness, VII. Constructiveness, VIII. Covetiveness, and IX. Secretiveness, established. Organs of sentiments of which X., XI., XII., and XIII. are common to man and animals:—X. Self-esteem, XI. Love of approbation, XII. Cautiousness, XIII. Benevolence, and XIV. Veneration, established; XV. Hope, probable; XVI. Ideality or Imagination, established; XVII. Conscientiousness, probable; XVIII. Firmness, established. Organs of knowing faculties:—XIX. Individuality, and XX. Form, established; XXI. Size, and XXII. Weight, conjectural; XXIII. Colouring, probable; XXIV. Locality, established; XXV. Order, probable; XXVI. Time, conjectural; XXVII. Number, XXVIII. Tune, and XXIX. Language, established. Organs of Reflecting faculties:—XXX. Comparison, XXXI. Causality, XXXII. Wit, and XXXIII. Imitation, established. The following is the concluding paragraph of the essay:—"Here, however, your limits compel me to take leave of the subject. It is new and highly important, and perhaps it may be thought presumptuous in me to give an opinion of its merits. I like the foundation on which it is raised, that of *actual observation*; and if my own limited observations deserve any faith, I would augur favourably of its progress and farther improvement. At all events I would caution your

the appearance of this essay, and he submitted proofs of it to Dr Spurzheim ; but before they were returned the magazine was published. The opponents of phrenology discovered some trivial differences between the " explanation " and Spurzheim's theories, and made much of them. The period was one in which personalities were often obtruded into discussions of principles ; and in the uproar which the essay created, Spurzheim's private character was remorselessly assailed. The charges against him were, however, petty in themselves, and easily shown to be false. Combe had the gratification of finding that he had created some sensation, and also that he had attracted several new students to the science. He became the more interested in pursuing the subject ; but he still questioned every principle of the system, and endeavoured to satisfy himself of its truth or falsehood by observation. The excitement produced all kinds of squibs, satires, and a long poem, entitled the " Craniad," in which Spurzheim's arguments were quoted (*mis-quoted*, he declared and, in several instances, proved) in footnotes, and held up to ridicule in the text. Dr Gordon (the *Edinburgh Reviewer*) was supposed to have had some share in the production of this work. Spurzheim was invited to return to Edinburgh, but he was engaged in London to deliver several courses of lectures ; he was also occupied with the examinations necessary to obtain his degree as a licentiate of the London College of Physicians, and therefore was unable to accept the invitation. His removal to Paris rendered another visit to Edinburgh inconvenient ; and, besides, he thought it unnecessary so long as he had such an able defender of the cause as Combe in the Scottish capital. Although Combe proceeded with characteristic caution in dealing with phrenology, he was rapidly becoming identified as its leading exponent ; and he had to submit to much derision in consequence.

On Tuesday, July 15, Combe, with two friends, sailed from readers against rejecting it on mere clamour and declamation. Let them examine it and trust to their own observations before they decide."

Leith for London, whence they were to proceed to the Continent. They anchored off Greenwich Hospital on Saturday the 19th. The passage had been pleasant enough; although lying occasionally becalmed tried the patience of the travellers. Combe experienced little sea-sickness; the table was well supplied by a black cook, and he enjoyed the novelty of his position and the glimpses he obtained of the English coast. After examining the hospital at Greenwich, the three friends took coach for London. They spent only a few days in the metropolis, visiting the various show places, the theatres, and Vauxhall. At the latter place, the dazzling lights and scenic effects filled Combe with admiration; but he was not so well pleased by the performances. "Madame Sagui exhibited rope-dancing, the indecorous attitudes of which filled me with disgust; and the other exhibitions of dancing in the different saloons were not only contemptible but abominable."

At ten o'clock on the 23d July the three young Scotchmen mounted the coach for Brighton. The day was fine, and they were delighted by the beauty and fertility of the country, and amused by the "clumsy old-fashioned ploughs mounted on wheels and drawn by four horses" which they saw in use. They admired the cleanliness and picturesqueness of the towns and villages through which they passed, and thought their own country far behind England in the former respect. But they were most impressed by the charms of the English ladies. "At Uckfield the people came to their windows to survey us, and, looking at them, we were delighted, for we never saw so much female beauty in such a short compass in our lives." The coach arrived at Brighton at six o'clock in the evening, and Combe gives an amusing description of the place as it was sixty years ago in a letter addressed to his mother.

After referring to the grand Pavilion and stables which the Prince Regent had erected at a cost of £70,000, he says:—

"The houses have a genteel, airy, but unsubstantial look. They are generally four stories high, but so narrow that there

can be but one apartment in each flat to the front and another behind, and even these must be small, for the houses do not go far back. They are, however, well furnished, and the fashionables sit with open windows at breakfast and tea, and make all show they can. There are numerous contrivances for the amusement of idle or sick people. There are small coaches, complete like a street coach, and on four wheels, but drawn by two men. The wheels are very small and low; and I have doubts whether the coach will hold two or four persons. There are also donkey-chairs, shaped like a taxed-cart, on low wheels, drawn by two asses, fully caparisoned. Next, there are 'cuddies' with ordinary side-saddles, and also with saddles having a stuffed chair on the top of them, into which the lady can be buckled, and then the ass must play 'Geordie's' tricks before she can fall out. There is a circulating library, to which a hall is attached. Here an amateur band of gentlemen played excellent music in the evening; ladies and gentlemen walked about, or sat around and listened, talked or read as they felt inclined. The effect of the whole was very agreeable, and it seemed a mutual arrangement to communicate pleasure and make life pass enjoyably."

They sailed for Dieppe, with a favourable breeze, in a packet of 60 tons. The fares were two guineas for those who descended into the cabin, and one guinea for those who remained on deck. Combe and his friends resolved to stay on deck, and became the more resolute when they found the captain adopting petty manœuvres to force them below. They had covered themselves with an old sail to keep off the spray, but the captain ordered it to be stowed away "lest it should get wet!" The three travellers buttoned their overcoats and retained their position on deck. They were glad they had done so when they observed the frequent journeys made by the steward between the cabin and the bulwarks. The steward was "a great beau, with a fur cap and gilt-lace band, a frock-coat, white trousers, white stockings, and dress shoes, and he performed his duties with good humour. The boat left Brighton at one o'clock on Thursday, and arrived at Dieppe at eleven o'clock on Friday forenoon. To the modern traveller who is accustomed to perform the journey from London to Paris in nine and a half

hours, the following details will be amusing. In Combe's letter to his mother he says:—

“Before we set foot on French ground we had a row. The commissary of police must go on board and examine all the passports before the passengers are allowed to land. The commissary was at church, either at prayers or at a procession. We waited half an hour, and still he did not come. The Englishmen lost patience and insisted upon landing. The Frenchmen opposed it, and much blustering and many high words ensued. At last the beau of a steward collected all our passports and got permission for us to land. I got out among the first, and was marching off towards the town. A large gendarme with a red nose, comical face, and a sword at his side, placed himself before me, and said in French, ‘Wait a little, sir.’ I stopped; this was to allow all the passengers to get out. We were then surrounded by a band of gens d’armes, and marched away like a flock of geese to the custom-house. Our baggage was here searched, and we were set at liberty. All this was done with great politeness, and we met with nothing but civility from every one. In a few hours we received notice that our passports were ready; they were new ones, those we had got in England having to be forwarded to Paris, where we were told they would be given to us. The clerk who writes out the new passport measures the traveller’s height, asks his profession, and inserts a description of his whole physiognomy. The fee demanded is two francs, ‘pour le gouvernement, et ce que vous voulez, monsieur, pour moi.’ We gave him two francs for the three passports, and he was satisfied.

“The diligence is an immense, heavy, clumsy vehicle, such as is described in the beginning of the ‘Tales of my Landlord.’ We set out for Rouen on Saturday morning at ten minutes past ten, with seven outside passengers, six inside, three in the cabriolet, and the conductor with the baggage of the whole party stowed into an immense basket covered with straw and canvas. The harness was the most miserable that can be conceived, almost all made of ropes and untanned leather; and it showed so many patches that it might have been a hundred years old. However, the five horses set out at a good trot, and did nearly six miles an hour. The driver rode on one of the hind horses, and showed wonderful dexterity in the use of a long whip, to the unremitting application of which a great part of our speed was owing. The horses were neither good nor bad, had long tails tied in a knot, and long manes. The

whole posting department is in the hands of the Government, and seems pretty well arranged. The horses at the different stages were always ready when we arrived, and were yoked in a minute, to which expedition the primitive simplicity of the harness contributed not a little. The drivers are not paid at each stage. The conductor goes the whole way, and at the house where the diligence stops the passengers pay a regular sum in full of all demands; the charge against us three was four francs and a half. The luggage basket is not opened till all the passengers have paid their fares, and then they are ranged around it that every one may look after his own.

“The surface of the country is undulating; some of the heights are pretty considerable, and the descents steep. The road from Dieppe is carried in a straight line, or nearly so, and is often very steep both in ascent and descent. It is, however, broad and exceedingly well kept; it is repaired with flint. There are some miles of a pavé, which is also in good order; but it is exceedingly disagreeable to travel over it, as one is stunned to death by the noise of the diligence. There are few houses of any kind along the road. No such thing as our Scotch or English farm-houses, very few villages, no gentlemen’s seats of a moderate size, but here and there a few large and splendid châteaux. The houses of the people on the roadside and in the villages are of timber or mud in general, a few of brick; most of them are thatched, but a few are slated. The châteaux are generally of brick. The whole appearance of the country and its habitations indicate the want of a middle rank in the state. The waggons in use for carrying heavy articles are long and narrow, mounted on high wheels and drawn by three, four, or five horses in a line. The carts also are long and narrow, with high wheels, and are drawn by one horse.

“We arrived at Rouen about five o’clock afternoon (Saturday). You will scarcely believe how I spent Sunday, even when I tell you. In the morning we went to a magnificent cathedral, where we heard a sermon in which there were many exhortations to repent and lead a new life, and many threats of the pit. The congregation then sang and bowed to the Virgin, and as our curiosity was satisfied we came away. All this time the shops were open, and a vegetable market was held in the square, of which the cathedral formed one side. We went to a stationer’s shop and bought books. Next we went to a gallery of paintings, which is open only on Fridays and Sundays; and in the evening, which you will think worst of all, went to the theatre. It was crowded in every quarter, and the piece was a new production, called ‘The Prisoner of New-

gate.' There was no play on Saturday night, as Sunday is the chief day.

"We left Rouen yesterday (Monday) morning at five o'clock, and arrived at Paris at five o'clock in the evening, being a distance of eighty miles in twelve hours. The ticket is only about 12s. 6d. English money for the inside, which is certainly very cheap. At all the inns we were grossly overcharged, being English. In Paris we are better off; we dined here yesterday, and had soup, roast veal, green peas, a dessert of strawberries, and a bottle of wine between two of us for half-a-crown each; at the country inns they charged us about fifteen shillings for a similar dinner. As we drew near Paris the country became very fine. The crops are actually ripe, the rye is led in; we saw the people cutting wheat and leading it in at once. They use the sickle as we do in Scotland, and plough with two horses. Their ploughs have wheels, but as they go only 4 or 5 inches deep with the furrows they are easily drawn. There are a great many vineyards about ten miles from the capital."

Combe and his friends established their headquarters at the Hotel Coquillère, where Dr Spurzheim was staying. Sixteen days were spent in Paris in the arduous, and, to youth and inexperience, delightful task of sight-seeing; the theatres, the Louvre, the Tuileries, the Luxembourg, the catacombs, the monuments, an excursion to Versailles, then back to the Palais Royal and the cafés. They made the most of their time; but Combe was chiefly interested by the pictures in the various galleries, and in observing the character of the people. He was impressed by the grandeur of the buildings, and thought London looked like "a brickfield compared to Paris." He made the usual discovery of the national vanity of the French, and of their desire for pleasure. He was struck by the fact that women were much more generally employed there than at home; and he was inclined to think that they had better foreheads, in proportion to the men, than the ladies of England. Spurzheim, however, said it was not that the foreheads of French women were better than those of the English women, but that the foreheads of Frenchmen were not so good as those of Englishmen. From this it seems that Combe, although busy and deeply

interested in his new experiences, found time to discuss phrenology. His letters home were long and filled with descriptions of what he saw, but he entered into no disquisitions upon his favourite science. He had to make the most of his time and space, and he therefore sent what would be of greatest interest to his friends at home. The postage of a letter in those days cost 3s. 3½d.

On the 13th August he left Paris for Mayence. The route of the diligence was through Epernay, Verdun, Gravelotte, and Metz. Here is a brief sketch of the latter town as it was then—

“On arriving within three miles of Metz, we found ourselves on the ridge of a hill looking down on a beautiful and fertile plain, in which the town is seen. Its cathedral and governor’s palace rising far above the houses, and its ramparts strike the traveller with astonishment at their immense dimensions. All around Metz, and at a very little distance from it, numerous villages are perceived. The sloping sides of the hills are covered with vines; and the plain, which extends as far as the eye can reach, is covered also with vines and corn. The fortifications of the town we found on entering it to be very strong, and to consist of five or six lines of ramparts and ditches on the south-west side. Indeed, a considerable part of the town is built on detached artificial islands; so that although one were taken the enemy would still find a rampart and a ditch defending the entrance to the interior of the town; and this again and again for nearly half a mile. The town is built on the Moselle, which is here a considerable river, and is turned round it on all sides. The population is 32,099.”

The travellers quitted Metz at five o’clock on Sunday morning (17th August); they reached Saarbruck at six in the evening, and so far they had found travelling in the diligence agreeable.

“The roads on the whole have been good; but the pavé of some of the villages through which we have passed to-day is the most miserable it is possible to conceive; and we jolted over it at a pace of a mile an hour, and were nevertheless often almost shaken to pieces. The travelling in the French

diligence I have found to be very comfortable. The first night and the last of a long journey are passed on the road; but on every other night the diligence stops at six or seven o'clock in the evening at an inn, generally in a town, where we have supper at a public table, and sleep till half-past four next morning. At that time we are called up, and must be ready to enter the diligence by five o'clock, as it starts very punctually. We generally took a cup of coffee and a small piece of bread before starting; then we travelled till ten, eleven, or twelve o'clock, as the inns were near or distant, without stopping, except to change horses; then we dined or had a *dejeuner*, which is the same thing. We were generally allowed an hour for this meal. We started again, and travelled till six or seven in the evening, when we stopped for the night. The diligence goes at the rate of about five miles an hour, exclusive of stoppages; and as we slept every night, the journey was much like posting for pleasure in England. I was always well and in high spirits. The fatigue was sufficient to make repose a pleasure, and not so great as to be painful.

"One of my fellow-travellers in the diligence was a French general, who had served at Marengo, Jena, Austerlitz, and Moscow. He had been taken prisoner near Hamburg, and was not at Waterloo. He was a man who made no pretensions, but he gave himself no trouble about any one. He spoke of Napoleon, calling him, as they all do, *Bonaparte*; and said that he owed more to fortune than to merit, although he had much talent also. He spoke of the different nations as soldiers. The Dutch, he said, were the worst; and with a hundred chosen French he would attack and beat six hundred of them. The Russians were excellent soldiers, but ill commanded. The English and Scotch excellent soldiers; but all were inferior in point of celerity of movement to the French. He said he would attack with French troops and retreat with British; for the French could never stand when once turned.

"Saarbruck is really a German town, although there is no natural division betwixt it and France, but the people are of a different tribe from the French. Here we saw the organs of cautiousness rising in the heads, and the foreheads becoming like those of Englishmen. The deportment of the people, whilst their manners are French, was more grave, and their speech slower. There is no doubt that the organs of cautiousness are not nearly so much developed in the French as in the English and Scotch.

"On leaving France the French passengers spoke more freely on politics. On looking at a number of francs, of which some

bore Napoleon's head and some that of Louis, they laughed at Louis, and said of Napoleon, 'Ah, quelle tête!' They certainly were in the right; for had Louis been a man of talent he would have overturned Dr Spurzheim's system, his head is so little developed in the quarter of the reflecting faculties. The Frenchmen now related some curious anecdotes of the devices fallen upon by various individuals to express their attachment to Napoleon and yet keep within the law. One set of students went through the streets of Paris singing, 'Il reviendra, il reviendra, il reviendra!' They were seized by the gens d'armes and interrogated: 'Qui est ce qui reviendra?' They all had their answer prepared—'Le pain à deux sous la livre,' for at this time the bread was very dear. Of course this was a wish not liable to punishment, but they were requested not to make such a public expression of it in time to come. On another occasion when the king was passing, certain individuals were heard vociferating, 'Vive le Roi' with astonishing vivacity; but they added to every 'vive le roi' the words 'de Rome,' in a suppressed mutter like 'drome.' Louis appears to be a good-natured, well-meaning, but imbecile man. He seems to have the hatred of none and the respect of none. His attendances at mass are quite ridiculous, and the first article in every day's paper under the head of Paris is—'The king heard mass yesterday at twelve o'clock.' The French laugh at this, and certainly if he will be devout, which is very proper in itself, he ought not to cause his devotions to be so much *read* of men. We saw the king's brother, 'Monsieur,' in the Chapel Royal on Sunday, 13th August. He was a pitiful, bigoted-looking person; he sat with an air of gravity muttering over his prayers, with his lips going and his hands moving in a manner that conveyed no impression to the mind of a spectator but that of imbecility and superstition. The busts of the royal family are exceedingly like them. There is not a good development in any one of the busts except that of the Duc d'Orleans, and that of the Duchess d'Angoulême (No. 912, in marble) is pretty fair. The others are very deficient indeed, but that of the Duc de Berri (No. 899) has order largely developed. In Paris we never heard the king spoken of, at least very seldom, and never with any feelings of respect."

From Saarbruck the travellers proceeded to Mayence passing through Hombourg. From the latter place they travelled all night, and were escorted by a Prussian horseman, armed to the teeth, to protect them from robbers. The conductor was

armed with sword and pistols, and most of the travellers carried pistols, stilettoes, and sword-canes. The weapons were happily not called into use, and the diligence reached its destination in safety on the evening of Tuesday, 19th August, the journey from Paris having occupied seven days and two nights of steady travelling.

“The fair was being held when we arrived. It lasts for four weeks, and when it is done the fair at Frankfort commences. The market-place is very wide; it is covered with wooden erections for temporary shops arranged in streets, and in them is exposed every species of commodity. On the whole, however, the goods did not appear to be very splendid or valuable, but a mere spectator could not well judge of this. We were again surprised at the acquisition of the continental people in languages. We went to a stall to purchase quills. Mr Schmidt (a fellow traveller) spoke in German and was answered in German; the Frenchman spoke French and was answered in French; and we, being heard speaking English to each other, were addressed in English—all by the same person, who appeared rather like a chapman than a merchant. On arriving here (Mayence), we heard of a report that Napoleon had escaped to North America, which it was said had come from England, and had been published in the Frankfort papers. Although it seemed to us ridiculous it produced a great effect upon the French; and from the delight with which they talked of it, we could easily judge what their feelings would have been had it been true.”

After paying a short visit to Frankfort on-the-Main, the travellers sailed from Mayence down the Rhine to Cologne; thence proceeded by diligence to Brussels. They were surprised by the few signs of the recent war visible in the various towns and villages through which they passed. The crops were in excellent condition; the people were busy and apparently happy in working out their individual destinies. Even at Waterloo there was nothing to remind them of the war except the mounds, and the charred ruins of Hougomont. The bullets and other relics which were sold by the guides on the field of battle were already regarded as ridiculous shams,

and laughed at; so Combe, instead of purchasing any of them, plucked a few ears of ripe wheat to serve as remembrances of his visit. From Brussels he proceeded to Antwerp, Breda, Utrecht, and Amsterdam, and at the last named place he embarked for England. He reached home towards the end of September, his health improved by the tour, and his mind refreshed and invigorated by his new experiences. His interest in phrenology had become intensified partly by his conversations with Spurzheim in Paris, and chiefly by the observations of character which he made in the course of his travels. His conviction of the general truth of the science was now firmly established.

Soon after his return to Edinburgh he was introduced to Sir George Stewart Mackenzie, of Coull, Ross-shire. Sir George took an active interest in all literary and philosophical matters. He was the author of "Travels in Iceland," a book which obtained much popularity at the time, and was republished in 1843. He also wrote an "Essay on Taste," in which he ventured to question some of the theories of Dugald Stewart. He entered into the investigation of phrenology with Combe, and the friendship which thus began between the two inquirers continued through life. Sir George was impulsive, and apt to leap to conclusions; Combe was cool, practical, and determined to prove by reason and experiment every proposition of the new science. Having similar intellectual tastes, the difference of their characters gave them the more interest in each other. Mackenzie was moved by the enthusiasm of the dilettante in science, philosophy, and literature; Combe was moved by an earnest spirit of inquiry, and an earnest desire to solve the problems of religion and philosophy, which had troubled him in the course of his education and in all his private reflections.

He was brought into contact with the literary circles of Edinburgh by acting as agent for James Cleghorn and Thomas Pringle, the editors of the *Edinburgh Monthly Magazine*, in their dispute with the publisher, William Blackwood. The

latter having disagreed with the editors announced the discontinuance of the periodical, and started *Blackwood's Edinburgh Magazine*. Cleghorn and Pringle, feeling themselves aggrieved, sought compensation for their share in the copyright of the original magazine, and at the same time they joined Blackwood's rival publisher, Constable, in issuing a new series of the *Scots Magazine*, under the title of the *Edinburgh Magazine*. There was a good deal of wrangling amongst the editors and publishers, and the vigorous vituperation in fashion in those days was used freely by both sides. Combe displayed his usual discretion in conducting the case, and succeeded in arranging it without going into court. His clients received from Mr Blackwood £125 in payment of all their claims. *Blackwood's Magazine* was fortunate from the beginning in its contributors and the number of its subscribers; and although opposed to the *Edinburgh Review* in most things, it surpassed that periodical in abusing and ridiculing phrenology and its professors.

Andrew Combe had gone to Paris to study medicine, and in the letters written to him regularly twice a month by George, there are glimpses of Edinburgh life at this period.

"1st March 1818.—You ask if the college was on fire. It was. Some plumbers had left their chauffers burning at the breakfast hour on the roof above Hume's class-room, in the north-west corner, and the chauffers took advantage of their absence to set the roof on fire. Their operations, however, were soon detected, and Mr Fyfe mustered four women who were cleaning his rooms, and they, with their tubs, extinguished the whole combustion almost before the fire-engines arrived. This meritorious service was represented to the Lord Provost and magistrates in council assembled, and they, to testify their high sense of the women's deserts, enacted that they should be suitably rewarded. But at this time the clamour about burgh reform was at the highest, and lest they should be blamed for extravagance, if a day of accounting came, the magistrates modified the reward to the sum of 1s. 6d. to each of the women. This reward—worthy alike of four washerwomen and a great city—was paid over to Mr Fyfe to

be distributed, in name of the town, to the meritorious fair. Mr Fyfe claimed at the same time compensation for the loss of a washing-tub, which some honest person in the mob had abstracted; but he was told that the town could not pay such losses, and that he should have looked better after the tub. From these specimens of care and economy you may easily conceive that our burgh is in a fair way of growing rich. But, nevertheless, the discontented are going on with the process in the Court of Session to have the election of the magistrates declared null, and the Court, according to the good established practice, is taking all due time for consideration, and both parties are living in hopes of success.

“Sir Richard Croft’s death has created a great sensation; but it is not reckoned by the unprejudiced as irresistible evidence of his having mismanaged the Princess (Charlotte). That tragical event, even although he had done his duty, was quite sufficient to make a deep impression on a sensitive mind; and when he found by the diminution of his private practice that the public had lost confidence in him, the impression might easily develop into insanity. It is true that Dr H. here unequivocally blamed him, and an action for damages against H. was actually pending in the Court of Session at the time of Sir Richard’s death. Prince Leopold has almost gone distracted on account of Croft’s suicide. . . . You may tell your friend Monsieur l’Avocat, that Nap’s carriage, with all its furniture, drivers, &c., as captured at Waterloo, is now exhibiting in Edinburgh to the great delight of Saunders, and that he would fight again for such a trophy of victory.

“25th March 1818.—The Union Canal is now fairly begun. The men are cutting at the Gilmore Street Park, at Hermiston, and at Ratho all at the same time. The Gas-Light Company is busy laying pipes along the principal streets of the town to light next winter. . . . Miss Combe (his sister Jean) and I have just gone to Dr Gardner to learn Italian. We have had only two lessons as yet, but we are through the nouns and regular verbs. I am able to read our prose collection straight forward, and understand the sense.

“29th April.—Tell Dr Spurzheim there is another magazine in town (the *Literary and Statistical*), for which I have written a full defence of the system of phrenology, and I have received a very polite epistle from the editor. This is a new quarterly publication, and the article is to be inserted in the August number, the May one having been completed before I wrote it. Thus we are likely to get justice done the doctor at last. Tell him, however, that a shoemaker from Linlithgow has been with

me to-day, who is an astonishing mechanical genius by the inspiration of nature. He has invented a perpetual motion machine, which has worked since October last, is still working, and promises to continue doing so until the materials wear out. He is a perfect enthusiast in mechanics, and has made other very ingenious machines, yet the organ of Constructiveness is less developed in him than almost any other organ. He has an excellent development of the knowing and reflecting faculties, except No. 7 (Constructiveness), and has a good deal of No. 16 (Ideality or Imagination). I examined his head narrowly, and am scarcely mistaken. He is a journeyman shoemaker, so that his genius for mechanics is without doubt natural.*

"15th May.—*Blackwood's Magazine* goes on libelling in a most extraordinary manner. The April number contained a vile attack on Jeffrey, and one on a Mr John Douglas, a writer in Glasgow. Mr Jeffrey took no notice of the attack on him; but Douglas, being in Edinburgh in May, bought a great horse-whip, went to seek Blackwood at his shop, met him in Princes Street by chance, and gave him a sound horse-whipping. Blackwood took the advice of John Wilson, the poet, who is his editor, and he advised him to wait for Douglas going off in the Glasgow coach at four o'clock that afternoon, and take revenge; which he did. At four he appeared armed with a great stick, supported by John Wilson, James Wilson (John's brother), and Hogg the Ettrick Shepherd and poet, at his back, and he commenced an attack on Douglas. Douglas still had the whip and defended himself with it till he got into the coach, and there the row terminated for the time.

"Now when you have opportunities of getting subjects easily, I beg particularly that you would study Spurzheim's dissection of the brain; for as it is very probable I may one day write about that system I am anxious to get at the truth of the anatomical part as well as the other. Would you dissect and note down what you see about the fibres; about the brown matter in the *corpus dentatum*; whether you see any great difference in the thickness of the skull at different places of the same head; whether large cautious organs, or small cautious organs have really a corresponding shape of the brain within; whether the frontal sinus presents any *general* obstacle to the discovery of the development of the inferior and anterior parts of the brain? In short, I wish you would study what Spurzheim has written on the brain, and make yourself able to defend him if he be correct, or to enlighten

* The machine proved a failure as soon as it was placed beyond the inventor's reach.

me if he be wrong. If the anatomy be as well founded as the observations on the organs indicating character, I shall be satisfied."

The attention which the series of essays in the *Literary and Statistical Magazine* attracted, encouraged Combe to pursue his investigations with increased ardour. The more he tested phrenology he became the more satisfied of its value, and the more eager to give its lessons to the world. About the close of 1818 he again urged his brother to give especial attention to the anatomy of the brain, to make careful notes on all the controverted points, and so be able to speak or write on the subject from certain knowledge. The success of his articles had suggested two ways in which he might promote the interests of the science by enabling the public to understand its real nature, and the philosophy of mind founded upon it. First, he proposed to collect his essays and to publish them in a complete form, with the numerous additions and improvements which his growing knowledge of the subject enabled him to make. Second, he meditated the delivery of a series of public lectures at some not very distant period, on the philosophy of the system, and he desired Andrew to be ready to defend and to explain the anatomy of it. To his brother he revealed every thought and hope inspired by his studies; he already believed that a time would come, sooner or later, when phrenology would be recognised as the true philosophy of the mind; but conscious that his convictions were influenced by enthusiasm, and fearful of error, he deliberately avoided the subject in general conversation. He had resolved that it should not be obtruded on any one. Self-respect also supported him in this course, for "Craniology,"* as the system was then called,

* "The names usually given to the system are Craniology and Cranioscopy; but these are incorrect; for the functions connected with the manifestations of the mind are in it never attributed to the cranium, but to the brain only; and even in regard to the brain, its structure and functions are not the ultimate objects of investigation, for it is considered only in so far as it is the instrument by means of which the innate faculties of the Mind manifest themselves in the

was only a butt for the jests of the many who had accepted the verdict of the *Edinburgh* as final, and who mirthfully quoted the clever burlesque in *Blackwood* in answer to any attempted argument. Combe would have nothing to say to those who approached the subject in this spirit; he considered discussion with them a waste of time. But when any one expressed a serious desire to understand the system, he found intense pleasure in acting as guide and fellow-student. At the close of 1818 phrenology had gained many new disciples through Combe's steady advocacy of its principles. To all who applied to him for direction in their inquiries he gave one leading precept: "Observe nature for yourselves, and prove by your own repeated observations the truth or falsehood of phrenology."

external world. The real subject of the system is the Human Mind; I have therefore adopted the term 'Phrenology' (from *phrēn*, mind; *logos*, discourse) as the most appropriate, and that which Dr Spurzheim has for some years employed."—*Introduction to First Edition of the Essays.*

CHAPTER VII.

1819-1821.—GEORGE AND ANDREW COMBE—PROGRESS IN PHRENOLOGY—PROPOSED LECTURES—CHARACTER OF MISS COMBE—DEATH OF MRS COMB—REFLECTIONS ON THE FUTURE STATE—ESSAYS ON PHRENOLOGY—DR P. M. ROGET—PUBLICATION OF THE ESSAYS—PREJUDICES AGAINST THEM—RECOGNITION OF THEIR MERITS—MACVEY NAPIER—PRINCIPAL BAIRD—SPURZHEIM—PHRENOLOGICAL SOCIETY FOUNDED—DEATH OF JAMES COMBE—ROBERT OWEN'S NEW LANARK—DR CHALMERS—OPPOSITION TO THE NEW DOCTRINES—ANCIENT PHRENOLOGISTS—THE "TURNIP HEAD"—THE CASE OF DAVID HAGGART—DR ABERNETHY'S PAMPHLET.

COMBE was in his thirty-first year in 1819, and his energy was severely tested by the multiplicity of his engagements. His professional practice was large, and he satisfied his clients that their interests were safe in his hands. The brewery had been carried on at a loss for the previous three years; because the war had left the masses too poor to drink ale. Brewers were becoming bankrupt in every quarter. The Combe brewery went quietly on at the loss of some hundreds of pounds where others had lost thousands. George was superintending its business, with the assistance of his brother James as acting manager; and he ultimately retrieved its losses. His brother Andrew—"the Doctor," as he was always called—was about to return from Paris to establish himself as a physician in Edinburgh; and the many speculations on this subject in George's letters, show the affectionate anxiety with which he regarded his brother's career. The doctor's means were

almost exhausted by the expenses of his education, and George had to provide for his entrance into professional life. This he was willing to do at any sacrifice to himself. He believed in the doctor—as the whole family did—and was cheerfully ready to do anything which might further his interests and preserve his health. There was more than fraternal affection between George and Andrew: there was devotion to each other. Whatever occupied the one, interested the other; whatever troubled the one, distressed the other: there was a singular unity of interests and aspirations in these two brothers which drew them more closely together than mere bonds of relationship could have done. George, who was nine years older than the doctor, had, in a manner, forced Andrew into his profession; he had directed his studies, and he was now eager to give him a fair start in life. Some time before, George had left the house in Bank Street and removed to Hermitage Place, Stockbridge, at that time a pleasant locality with a free prospect to the west. Here he bought a house, which apparently at the time of the purchase he intended to be his permanent residence. His business was conducted in chambers in Milne's Court, a place then in repute for writers' offices, but now decayed and inhabited by families of narrow means. It is situated at the head of the High Street, between the street and the Free Church College. The plan now agreed upon was that George should remove from Hermitage Place to a locality more suitable for a physician, and that the doctor should live with him, having his board free until his practice should enable him to pay for it; and George thought it would be strange if in the first year the doctor did not earn enough to pay for clothes, which would be the only expense he would have to incur. Andrew's health was always precarious, and he reached his fiftieth year only by rigid observance of those laws of health of which he was the earnest and eloquent exponent. He was in consequence frequently filled with morbid fears of the expenses which his education involved, and of his own future. To these fears George

answered that the family was willing to take the risk of his success, and as long as he (George) had a home there would always be shelter for him. In guiding and comforting him, George had done so much that the doctor was full of gratitude as well as affection for his brother. He amply repaid the debt, as George owns, in the care which he took of his brother's health in after years.

Besides the occupations provided by business and family affairs, George was at this time most intently engaged in his study of phrenology. All that he had hitherto done on behalf of the system had been mere skirmishing: now he entered upon the serious battle which he carried on to the end of his life. He had moved with caution: he had written anonymously, and had spoken only as a student of the theories of Gall and Spurzheim. Now, having tested these theories by three years of personal observation and experiment, he was preparing to present himself to the world as the apostle of a new science, and a new philosophy of the mind which he believed to be of the utmost value to mankind in education, and in the regulation of social conduct. Whatever errors there may be in the system which he advocated, they are of little consequence when we remember the practical advantages derived from his work; and his enthusiasm, which was the result of sincere conviction, was admirable in itself, and the source of beneficial effects to many. He had a shrewd, practical intellect, and was not at all disposed to colour common things with imaginary attributes; yet he appeared as the apostle of a subject which men of science declared to be an absurdity, and belief in which could only be explained by an over endowment of imagination. Combe had studied the subject and satisfied himself of its truth. He constantly complained that the opponents of phrenology did not study it, and denounced it from mere impressions without any knowledge of its nature and scope. He was desirous to enable the general public to understand the real character of the new

philosophy, and therefore began to prepare his essays for publication in a complete form. He also prepared a series of lectures, which he rehearsed in the dining-room of Hermitage Place twice a week, in the presence of about a dozen friends, with the intention of repeating the expositions to a more extended audience by and by.

It is worth observing that the incognito of the author of "Waverley" was not so well preserved as is generally supposed. In March 1819 Combe writes to his brother the doctor:—

"Our theatre is now lighted with gas after the manner of Covent Garden, and most beautiful and brilliant it is. 'Rob Roy' has been turned into an opera, which has been performed thirty nights in succession, and every one fuller than another. Perhaps you do not know what 'Rob Roy' is. It is one of Walter Scott's Scotch novels, and very interesting. The piece is here acted almost to perfection. On 18th March Mrs Cocks* and your mother were in the pit seeing it, and were highly delighted. Mrs Cocks had not been in the play-house since the year 1772, and then she was in the two-shilling gallery, and she croaked an hour why we did not go to the two-shilling gallery now. The principal character is Bailie Nicol Jarvie of the Saltmarket, Glasgow, who speaks Scotch, and the character is done to the life by a Mr Mackay."

Combe was fortunate in his domestic surroundings. His sister Jean, who was one year older than he, managed his house with that genius of economy which makes home happy, and provides hospitality for friends without extravagance. But she was more than a good manager, she was an intelligent companion, and took a warm interest in all his pursuits and projects. She admired him, as the whole family did, but told him that he owed a great deal to his No. 10 (Self-Esteem), which gave him so much confidence. She studied languages with him, she read with him, and was one of his first pupils

* Mrs Cocks was the mother of Mr Robert Cox of Gorgie Mill. The son modernised the name.

in phrenology. There is much quiet humour in her letters to the doctor, in which she related the minor incidents of the family life, and reported the progress of Mr Combe, as she generally called her brother, whilst he mentioned her as Miss Combe. In several letters she gives playful descriptions of the flirtations of Mr Combe; but they were of brief duration, and, for the most part, Mr Combe appears to have been unconscious of the gallantries with which he was credited. He does occasionally allude to a "charming cousin;" but whenever he thought seriously of love he began to analyse the character of the object of his admiration so deliberately that the probable lover was entirely lost in the meditations of the philosopher. Miss Combe was aware of this, and only laughed when she heard of his attentions to some lady friend, which he paid in simple kindness, being set down by gossips to a deeper feeling. From such gossip she would pass on to practical questions as to the state of the doctor's socks and his wardrobe generally, commend him for his economy, and give him kind and sensible counsel as to the arrangement of his affairs. Then she would tell him something of her studies and the progress of Mr Combe in his work. The excellent qualities of Miss Combe were seen and valued by all who knew her; she was offered much praise, and she knew how to accept it—with modest pleasure in knowing herself appreciated, and without any pretension to superiority in consequence. She felt herself to be so much a part of George that the recognition of his genius afforded her as much delight as if the honour had been all her own; and she liked those who liked his "sober face."

With the exception of occasional excursions, and one journey to London in charge of the doctor, who was seeking relief from illness in a milder climate than that of Edinburgh, Miss Combe continued to be the most constant companion of her brother George, until she died in 1831. Her sympathetic nature and calm practical judgment made her the good genius of his household, and the valued friend of every member of the family.

On 10th May 1819, Combe had to write to the doctor the sad intimation of the death of their mother :—

“ Your letter to Mrs Cox came a few days after my last letter was despatched. When I wrote that letter I little anticipated the contents of this one. Your mother all spring had been now well, now complaining, but always going about, and always saying she felt no uneasiness but the decay of old age. About a month ago, however, we insisted that she was unwe^{ll}, but she would not allow it to be so. Other ten days went ^{on} and she appeared to get worse. A card was then sent to F^{or} against her will.”

After describing the medical treatment, and the various stages of Mrs Combe’s illness, he continues :—

“ I did not tell you all the evil, for I was sure you would be intolerably distressed, and be killed every day with anxiety to hear of her. On Saturday, 8th May, at 5 A.M., she was seized with excessive difficulty of respiration, and it continued unabated until she expired twelve hours after. . . . No woman ever fulfilled the duties of an arduous situation better than she; and although no mortal merit can claim eternal bliss as a right, yet if the God of heaven do not give eternal happiness to such characters as our father and mother, it is difficult to conceive who ought to inherit it. Her call has been sudden, but we must submit to God’s will.”

He wrote again to Andrew on the same subject, 2d July 1819 :—

“ You say you can scarcely think our dear mother dead. Every day I find her existing in my imagination with all the lineaments of reality. I find her in my mind’s eye, now seated at breakfast, asking the news; now in her arm-chair, working her stocking; now lying on the sofa when she was no longer able to work; and now stretched on the bed from which she never rose, pressing my hand in hers, and thus expressing attachment which her lips refused to utter. All this is painted in my mind with a strength and force that is really as distinct as if I saw it; and often I indulge the phantoms as a mode of holding a last converse with one so dear. This description, I am sure, is the counterpart of what you feel, and although the

reading of it will cause a new pang, yet there is a pleasure even in that pain, it is so tender. There is no recollection in regard to this modest, unassuming, and excellent woman, that gives pain except that of her being troubled in the hour of death by the frightful superstition which David* so sedulously hammers into his hearers. It was clear that her conscientiousness told her she was no better than other folk, and she had been taught to fear that the good and meritorious in this life might be damned in the next without a fault of theirs; and although her uneasiness was scarcely expressed, yet to those who knew the heart it was perceptible, for she said—'Oh, I could bear all this with patience if I were sure of a good place in the world to come.' No one will make me believe that this was the voice of a guilty conscience. It was great conscientiousness and cautiousness struggling with the terrors of a lamentable superstition. My heart burns to think that under this strange creed of ours the veriest scoundrel who has Hope large, and Conscientiousness small, should pass through the bed of death full of confidence, while the very excellent of the earth should groan beneath dreadful apprehensions arising from the very faculties which inspired their conduct with virtue. But I leave this subject as one too painful to be dwelt upon."

The decease of his mother caused him to abandon the idea of lecturing until November, and there was a possibility of still further postponement. He, however, sent the Essays to press, and expected to have them published in August. "I am now not afraid of ridicule. The enemies have never yet answered one of my papers, and even Mr Wm. Waddell" (a lawyer, and one of Combe's most sceptical friends) "begins to say that the public opinion is relaxing in its severity towards the system. The two principles on which I now defend the system with invariable success are, *First*, Dissection never reveals functions; now you, the anatomists, have only dissected, and, *ergo*, you must yourselves be in deep ignorance regarding the functions of the brain; and how do you presume to say that Gall and Spurzheim are either right or wrong? This has closed every medical mouth that I

* Rev. David Dickson, D.D., minister of St Cuthbert's parish, Edinburgh.

have seen opened. *Second*, Reflection on our own consciousness never reveals organs; and as you, the metaphysicians, have only reflected, *ergo*, you must of necessity be ignorant yourselves; and how do you come to pluck the mote out of Gall and Spurzheim's eyes when there is a beam in your own? These observations are a bulwark for the system, and simple as they seem I expect great results to arise from enforcing them."

On 2d July he writes:—"My book is now at the 126th printed page, and will be 320 pages in all. I have circulated collected copies of my essays, and those who have seen them, except Mr Waddell, have, so far as I can learn, ceased to laugh at the system. You seem astonished at my keenness and boldness. But you know I have the Love of Approbation which gives the desire for fame, and also Firmness, powerful. Now, in seeking fame, that is to say in seeking to appear as a literary man, the surest way to succeed is to take a subject which will stand under you and never lose its interest. The system is such a subject in every respect; and although its back be at the wa', my Firmness enables me to meet all the rubs with unconcern, seeing I am positively certain that I am sound at bottom. I do not expect my book to sell well, or to be thought of at first, but the reverse. I shall be disappointed however, if it does not make its way through time, and ultimately do no discredit to the author. It will have been a month or two before the public ere you come home. It will cost me, including advertisements, £120 for 750 copies. I shall be well off if I escape without losing £20 or £30, besides all my authorship and trouble, for works on philosophy by an obscure author never sell. Abram thinks better of the work, for he has taken a third of the edition on his own risk, that is, he advances a third of the cost and gets a third of the profit or loss. I did not hold out any encouragement to him to do so; but this shows that he has a higher opinion of my prospects than I have myself."

During the progress of the work through the press he was most anxious to ensure accuracy in all its details. He submitted the proofs to a professional anatomist; he sought Dr Spurzheim's counsel, which he received with deep respect, although he did not hesitate to differ from both Gall and Spurzheim whenever his personal observations led him to other conclusions than theirs. The two originators of the system had been for some time separated; the first continued to speak of the doctrine as he had done ten years before; the second had conceived new ideas from additional experience, and had adopted what he considered an improved nomenclature of various faculties and functions. He owned that Gall was the first to begin the investigations which resulted in the new system of philosophy; but he would not admit that therefore Gall was the only one capable of improving the doctrine. Combe followed Spurzheim more closely than Gall, and Spurzheim had so much confidence in his mastery of the subject, that he left him free to explain, as might seem to him best, the differences which had arisen between the two first exponents of the system.

The supplement to the *Encyclopædia Britannica*, contained an article entitled "Cranioscopy," written by Dr P. M. Roget, the first Fullerian professor of philosophy at the Royal Institution, and subsequently the examiner in physiology of the University of London. He was also the author of various physiological works, and of the popular "Thesaurus of English Words and Phrases." Although then a young man, he had obtained distinction in his profession; his article was decidedly condemnatory of the system of phrenology; but Combe thought that his arguments were based upon false data, and handled them very roughly in his Essays. Before publishing, however, he wrote to Dr Roget through a mutual friend (Dr Dewar):—

"I am at present engaged in preparing for the press some Essays on the system of Gall and Spurzheim, and in these Essays

I find it necessary to advert to your article 'Cranioscopy,' on the same subject, but to differ very widely from your views. In consequence, your article is spoken of in terms rather of severity than otherwise. It gave me pain to do so, but the interests of truth appeared to require it. As, however, I may have misapprehended the scope of your arguments, or may myself be mistaken; and as the furtherance of truth is the only object I have in view, I take the liberty to trouble you with this letter, and to say that I shall have great pleasure in modifying my observations if you are in the right, and in being corrected myself if I am in the wrong. If your views and mine shall not after all correspond, I shall be happy to print any observations with which you may be kind enough to favour me on the subject, either in defence of your own views, or in refutation of mine."

He then stated the grounds on which he objected to the article; Dr Roget replied, acknowledging his courtesy, and expressing the fear that there was no prospect of agreement between them on the merits of the system of Gall and Spurzheim, but that the difference lay in a narrower compass than he (Combe) seemed to imagine. Dr Roget repeated his arguments against the system, and explained the principles upon which he based them. Combe, desirous of doing justice to one who expressed himself as "open to conviction if the evidence in favour of the theory, furnished by observers worthy of confidence, should be ultimately found to preponderate," published the letters as an appendix to the Essays. Afterwards, Dr Roget did somewhat modify his condemnation of phrenology, and in 1820 Combe wrote to him:—"I am so sensible of the candour and politeness of your communications with me, that on future occasions the article 'Cranioscopy' and its author will be spoken of by me in a strain different from that adopted before enjoying the advantage of his acquaintance." In later editions the animadversions were almost entirely eliminated, and the two opponents continued to be friends, although they always differed widely on the subject of phrenology.

The Essays were at length issued, and the difficulties the work had to contend against may be comprehended from the following, written to the doctor, 4th November 1819:—

“So great was the prejudice against the system and the book, that no bookseller here or in London, whom I tried, would purchase it even at prime cost; and when Bell and Bradfute, as is the custom of the trade, carried it round after publication to the booksellers, only one of them would attempt to sell it, and he took but two copies. All this, however, did not appal me. It was advertised to be found in Bell and Bradfute’s alone, and from the first the sale began fair, and is going gradually but steadily on. The book is now in the hands even of the philosophers—Mr Welsh saw it in Dr Thomas Brown’s. One condemns my attack on the metaphysicians, but says I have vanquished the anatomists. Another condemns my physiology, but says I have done for the metaphysicians. One says the beginning is very dry, but the end excellent; another says the first essay is highly philosophical, but the rest of the book mere speculation. But all who have yet spoken seem to agree that the book has merit in one part or another, and that it is candid and honest. The *Scotsman* is to review it on Saturday. The *Edinburgh Monthly Review* (one set up since you were here) is to have at it on 1st December; and Blackwood’s men will in all probability abuse it well on 20th November, so that I shall soon make noise enough. Tell me whether you think the application of the principles original.”

One practical illustration of the interest which the Essays soon began to excite was afforded by the offer of the booksellers, Bell and Bradfute, to take one-third of the edition. The offer was declined. The other booksellers, who had at first refused to have anything to do with the work, now applied for copies, and although the sale was slow, it was steady, and much more extensive than the author had anticipated. Meanwhile, congratulations poured in upon him even from many who had previously expressed their contempt for the system. Dr S. Hibbert delivered an address to the Edinburgh Royal Medical Society against the doctrine, but congratulated the followers of Gall and Spurzheim upon the ability with which the cause was at length defended, and upon the

candour of the defence, which ought to serve as a model to the opponents." Mr Macvey Napier,* editor of the supplement to the *Encyclopædia Britannica* in acknowledging a copy of the Essays wrote:—

"I am not *altogether* ignorant of the nature and pretensions of what you call phrenological science. I conversed often with Dr Spurzheim on that subject, and have read part of his lucubrations. When your book came out I was induced to look into it, partly from curiosity excited by so rare an occurrence as a philosophical work from one of our *cloth*, and partly from hearing that it contained an answer to an article in my own work (the *Encyclopædia*); and though my glance was superficial and hasty, I saw enough to satisfy me that phrenology had found in you an able expounder and assserter of its doctrines. I fear I shall not be able for some time to enter more deeply into the subject, but I shall certainly bestow a more careful perusal upon your book as soon as I can spare a few days for that purpose. When I say that I do not expect ever to become a convert, I would not wish to be considered as a prejudiced or presumptuous scoffer; for I do think that the structure of the brain, as connected with extraordinary features of moral and intellectual character, presents a very curious subject of inquiry; but I do not think that I have any chance of living long enough to see a collection of facts of such extent and description, as to justify, I would almost say, any *one* of the numerous conclusions and generalizations which your sect have already, in the very infancy of observation on the subject, thought themselves entitled to form."

To the above, Combe annexed this memorandum:—

Mr Napier is well known as a metaphysician of the old school, and as an ardent admirer and defender of Mr Dugald Stewart. He is at present conducting a new supplement to the *Encyclopædia Britannica*, in which Mr Stewart's 'Dissertations' appear. The preceding letter is valuable, as showing how these gentlemen of the old school contrive to live in the midst of the lights of phrenology, and adhere to the darkness

* In 1825 Mr Napier was appointed Professor of Conveyancing (the first) in the Edinburgh University; in 1829 he succeeded Jeffrey as editor of the *Edinburgh Review*; and in 1830 he was appointed editor of the new edition of the *Encyclopædia Britannica*. He died 1847.

of metaphysical mysteries. They seem to feel it as a degradation to examine minutely, and to fear to be convinced on account of the humiliation of acknowledging previous errors. The exposition of the principles which Mr Napier received at the demonstration of the casts convinced his intellect,—for he has a strong reflecting head,—that we are in a new path, and in one which may lead to something; but instead of inquiring, or aiding us to inquire, into what that something is, he consoles himself with the reflection that we, his contemporaries, and may be, in his eyes, his rivals to fame, will never discover any one fact of importance in the science of the mind; but that after poking in the dark, and speaking much, we will die as ignorant as himself; that some happy genius will arise after we leave the scene, to bring forth the truth, and that then he will appear wise to have despised us, and to have left the matter to future generations to discover.”

The demonstration which Mr Napier attended was one given by Combe, at the request of Dr Baird, Principal of the University. The latter gentleman, although not a convert to phrenology, was desirous of seeing its principles fairly tested. He could not give his entire adhesion to the new doctrine, but he believed that it was worthy of honest investigation. Combe refers to the Principal with profound respect:—

“ After the publication of a sketch of the natural character of David Haggart, a murderer, drawn from his head before trial, a feeling hostile to phrenology became pretty prevalent. Dr Baird continued to stand firm as a friend to the science, and did not disguise his sentiments that it appeared to be founded in nature to a certain extent, and that it ought to be examined. In the midst of the clamour he prevailed on Dr Monro and Professors Wallace and Jameson to visit my collection of casts and have a demonstration. The principal’s conduct, standing as he does in an official situation at the head of the University, and surrounded by scoffers, shows very considerable independence of feeling, and an ardent love of truth. In fact, he has now and formerly done as much for the interests of the science as any person in his position could, with a due regard to propriety, accomplish; and this fact ought not to be forgotten in the history of phrenology. The professors above named were regular scoffers at the doctrines.

The fact of their attending a demonstration from me, implies some degree of growing respect, and there is a chance at least that in future they may be silent and cease to oppose."

Of the demonstration, Dr Baird wrote next day:—"Some striking facts you certainly stated, and showed luminously the principles on which Gall constructed the system, and Spurzheim, you, and others, proceed in establishing it. By the facts, all your last night's auditors must have seen that the system possesses some *prima facie* foundation; and of the principles, as sound and legitimate, they got the means of forming for themselves an accurate judgment."

The Essays introduced the author to many new friends; amongst others to Mr William Ritchie, S.S.C., one of the proprietors of the *Scotsman*, and editorial colleague of Mr Charles Maclaren, the chief and responsible editor of that journal. To the latter gentleman, also, Combe became known; in both cases the acquaintanceship ripened into an enduring friendship; and the hearty encouragement given to him at this time by Mr Ritchie was always gratefully remembered. Although differing widely in their views regarding phrenology, there was much sympathy in their opinions upon politics and religion. Combe soon after became an occasional contributor to the *Scotsman*, and continued to be so as long as he lived.

In country districts the ignorance as to the real nature of phrenology sometimes produced amusing incidents. There was a general notion that it had something to do with fortune-telling; but one would have thought that a clergyman would have been free from any suspicions of dabbling in *diablerie*. The Rev. Thomas Irvine, however, wrote from Lundie House, that on one occasion whilst explaining the system in the drawing-room, and experimenting on the head of a gentleman whose character was so pronounced that there was no difficulty in revealing it, he observed some ladies blessing themselves as if there were witchcraft afoot, and others hastily

drawing curls and bands of hair over their brows in order to conceal the full development of their organs.

Spurzheim expressed his unqualified admiration of the Essays. Having received an early copy, he wrote from Paris, 29th October 1819:—

“There is no doubt in my mind that your book is the most able defence of the doctrine in the British Empire. It must make a sensation in those who like truth. I am glad you have attacked the adversaries in front, and on their own ground. They will be obliged to conceal themselves, viz., to be silent, or they may think of a retreat. We have nothing to do but to stand with nature and proclaim her laws.”

Dr Combe returned to Edinburgh in December 1819, and took up his abode with George, at Hermitage Place, Stockbridge, whence they removed in May following to Brown Square, which was considered a better locality for the doctor to begin practice. The brothers entered earnestly into the work of propagating Phrenology; and in February 1820 they, with the Rev. David Welsh, Mr Brownlee, advocate, Mr William Waddell, W.S., and Mr Lindsey Mackersey, accountant, established the Phrenological Society. The Society, from this small beginning, rapidly grew in numbers, and consequently in influence, and was able to start the “Phrenological Journal” in December 1823. But, meanwhile, the ill health of the doctor temporarily interfered with the projects of the brothers. He had been scarcely six months at home when he was compelled to seek a more genial climate than that of Edinburgh, and George was once more left alone to fight the battle in favour of the system. At this time, too, there was again sorrow in the family, not only on account of the doctor’s precarious health, but also on account of the sudden death of James, the youngest brother, on the 19th May 1820. He was a robust youth with an adventurous spirit. He made a voyage to St Petersburg as a seaman, and on his return he became manager of the brewery which, under the supervision of George, he was conducting prosperously at the time of his death. Abram and he had

much mechanical genius; they were interested in the recent application of steam to the propulsion of vessels; and they purchased a small boat in order to make an experiment with machinery and paddles of their own invention. They embarked with a few friends for an excursion on the Firth of Forth. George says:—"James applied his great strength with all the ardour and energy of youth to the task of propulsion, over-heated and exhausted himself, and then cooled himself in a chill wind. Next day he fevered, and within a week after this excursion, died. This was afterwards regarded by Andrew as another life sacrificed to ignorance of the organic laws." James was within two months of attaining his twenty-first year; his youth, and the promise he had given of a useful manhood, intensified the grief of the family.

The *Scotsman* had spoken favourably of the Essays, and Combe believed that he had obtained an accession of professional employment in consequence. The *Literary Gazette*, at that time an important London journal, joined the scoffers at the system; but the *Edinburgh Christian Instructor* opened its pages to free discussion on both sides of the question, and the *New Edinburgh Review* was decidedly friendly. One incident, resulting from the publication of his book, gave Combe especial gratification. A lady wrote to him expressing deep gratitude for the relief and consolation which his work had afforded her under very sad circumstances. She had had a brother, amiable in every way, to whom she had been deeply attached; he committed suicide, and she was in despair. When she sought consolation from her intimates, they shook their heads and turned away. Under this misery she suffered for five years, when the article on "Cautiousness" explained everything to her; from it she learned to regard her brother as the victim of disease, and to hope that he would be forgiven. She could not rest until she had given her grateful thanks to Mr Combe; and it was a delight to him to think that Phrenology might thus relieve sorrow.

He was now extending his observations, whenever an opportunity occurred, into the bearings of Phrenology upon education and crime. He was convinced that the greatest blessing would be conferred on humanity by the System in directing the education of individuals; and in reducing crime by the timely discovery of propensities leading to its commission, which might be controlled and subdued by the careful training and development of the nobler faculties. Robert Owen's experiment at New Lanark was now in full force. Abram Combe, whose philanthropic nature induced him subsequently to make a similar experiment at Orbiston, which proved ruinous to himself, was eager to see the working of Owen's community. In a letter to Andrew, 7th November 1820, Combe describes their visit to New Lanark.

“On Saturday Mr John Buchanan and I went up to Lanark in a gig, where Abram met us. I sent my compliments to Mr Owen, and begged to know when I might wait on him. He asked us all to breakfast on Sunday. We went; were kindly received; spent the whole day with him; dined with him, went to his chapel in the evening; were invited to breakfast with him on Monday, but stopped at the inn; met him at the mills at ten o'clock that morning; saw his system and everything else till two, when we left him and returned to Edinburgh. We were exceedingly delighted. The whole number of individuals at his mills is 2700, of whom 2400 reside in his own village of New Lanark, and 300 in Old Lanark. The number of children from two to ten years of age is 400. They are taken into the institution at two years. Three women watch them until they are four years old; they then go to school. The hour of meeting in winter is 10 A.M. A large hall receives the children assembling for school, and those who come early play there till the hour of meeting. We saw them romping and playing in great spirits. The noise was prodigious, but it was the full chorus of mirth and kindness, and not the early growl of selfish passion. At 10 the scholars muster rank and file, and march to the music of a band of fifers, part of their own number, three or four times round the hall. They then form into a square; a teacher leads on the hautboy, and those who have voices join in singing three or four songs of the sweetest melody and merriest measure.

We heard them sing, 'Merrily every Bosom Bounded,' 'Loudon's Bonnie Woods and Braes,' 'The Maid of Lodi,' and 'Begone, Dull Care.' The music ended the dance began, and boys and girls executed several dances with a degree of agility and grace that might have done honour to Ritchie's ball. These exercises last for about an hour. Teaching on the Lancastrian plan then begins, and the dancing and music terminate the day as they began it. Mr Owen is well aware of the difference betwixt words and things, and has ordered £500 worth of transparent pictures representing objects interesting to the youthful mind, and he means to use them in teaching to enable them to form ideas at the same time that they learn words. The great lessons he wishes them to learn are, that life may be enjoyed, and that each may make his own happiness consistent with that of all the others. This system is really carried into effect to a very considerable degree among the children. For the older people he has provided many comforts also. He has store-houses in which articles of the best quality of food and clothing are kept; they are purchased at the first markets wholesale and sold to the people at reasonable prices. The tea, for example, comes direct from the India house in boxes. He was communicative and polite to a very high degree. I believe I told you his development—1 (Amativeness), 5 (Combativeness), 6 (Destructiveness), 7 (Constructiveness), 8 (Covetiveness or Acquisitiveness), 9 (Secretiveness), 12 (Cautiousness), 29 (Language), 31 (Causality), 32 (Wit), all small, especially those underlined; 2 (Philoprogenitiveness), moderate; 4 (Adhesiveness), 11 (Love of Approbation), 13 (Benevolence), 14 (Veneration), 15 (Hope), 17 (Conscientiousness), 18 (Firmness), 30 (Comparison), large; 16 (Ideality), 10 (Self-Esteem), and 19 (Individuality), moderate. In short, he is a moral enthusiast, and his head is a key to his character. We did not neglect Phrenology, and the opportunity for making observations was excellent. The teachers had studied the dispositions and faculties of the children more than any teachers I had met with. The varieties were so numerous and the differences so wide, that they were astonished at the facility and correctness with which we deciphered the characters; and the result was that Mr Owen ordered two books and two casts to be sent out by the first coach, which accordingly was done. He said that if I would come out at another time and examine the heads, he would register them in a book and see how they turn out, which of course I shall be happy to do."

There was much in Mr Owen's experiment which Combe admired, but he foresaw its failure, because the scheme did not make proper allowance for the development of individual character, which would ultimately rouse such contending interests as would destroy the community. This proved to be the fate of Mr Owen's philanthropic experiment, and Combe was not surprised when the end came. His brother Abram was so much attracted by the scheme as the beginning of a social millennium, that he proposed to join the community at New Lanark, with his wife and family. From this, however, he was dissuaded; but his utopian speculations were by no means suppressed. Combe regarded Mr Owen's head as on the whole rather a poor one, "the breadth both above and below, before and behind, being small, although the height and length are fair. The sentiments greatly predominate." The development of the head coincided, according to phrenological theories, with the character of the man.

Andrew Combe had proceeded to Leghorn, and there he rapidly regained health, to the great joy of his family. He possessed a nervous temperament; he was extremely sensitive, and he was much distressed at being so long a burden to his brothers and sisters. He was eager to be well and to be doing something for himself, which might enable him in time to repay those who had helped him. This noble impatience George understood and sympathised with; and in all his letters he implored Andrew, with affectionate solicitude, to think only of his health and not at all about money. The brewery was doing well under William Combe, who on the death of James had ceased to be a baker and accepted the management of the business at Livingston's Yards. The professional business of George had so increased that he was able to assure the invalid, that even if the family did not contribute equally to his support he could and would undertake the whole expenses himself, without diminishing his own resources. "In worldly affairs, therefore, we are really com-

fortable at present, and this shows that the tide of fortune ebbs and flows, and that in the ebb we should not despond, and in the flow not forget moderation. If you were well, no subject would remain for uneasy reflection, and a while's sunshine might beam upon us after our troubled days. . . . You know or ought to know that I would most willingly expend my last shilling in preserving you. Fortune has compensated me this year for her stings in the year before. Keep your mind therefore perfectly easy, for funds shall appear whenever you want them." At one time he had been afraid that the doctor would not survive many months; but when he saw the energy with which Andrew prepared for his voyage to Leghorn alone, he felt satisfied that he would live to return, although others thought he had just gone away to die. Combe thought that Providence had justified his faith, and he now believed that the doctor was spared to serve some good purpose in life. These hopes were fulfilled by his brother's career.

The Phrenological Society prospered; in 1821 it had thirty-three members, who were admitted on payment of a guinea each, and it was left to their option to do duty or not. There were also corresponding members in London and Paris. One of the new members was Dr Willis, assistant to Dr Barclay, the lecturer on anatomy in the extramural medical school of Edinburgh. Dr Barclay, in giving a demonstration of the brain, awarded great praise to Spurzheim as an anatomist. Principal Baird, without absolutely committing himself to the system, continued to assert its claims to honest investigation. A gentleman said in his presence, after listening to Combe's dissertation on the casts in his possession, "I am disposed to believe that there is something in this system after all; but I would as soon believe that the moon is made of green cheese as that all Dr Spurzheim says of it is true." The Principal quietly observed: "If you were to admit that the one half of the moon is made of green cheese, I do not see on what principle you could deny that the other half was the same."

Many who had been unable to make up their minds, or who had been afraid to express their opinions in favour of the new doctrine, now declared themselves in favour of it; many more ceased to laugh at it, and professed themselves ready to investigate and to become converts if the proofs should satisfy them that the system was based upon philosophic and scientific principles.

Dr Chalmers called upon Combe to see the casts. He had only half an hour to spare, but he remained an hour and a half. "He appeared acquainted with the organs and to have some knowledge of the subject. He had read the 'Essays on Phrenology' with pleasure, and said they first presented the subject to his mind from a philosophic point of view. He went away immediately after the demonstration, so that I heard no more of his opinions on the subject." He learned afterwards that Chalmers had been much interested, and was fond of discussing the phrenological theories amongst his friends.

Combe was proud of the progress which the system was making, and he had good reason to be so. Gall and Spurzheim had been laughed at; and the merits of Phrenology would have been extinguished in the laugh if George Combe had not taken up the subject. It was his persistent advocacy of its principles and his dogged insistence upon its truth which at length, on the appearance of his "Essays," obtained for the system a patient and respectful hearing. Crowds gathered round him, and the demand for admission to see his casts became so great that he was unable to accommodate all. A Mr Neill established a shop in the old town for the sale of casts, and found the demand so great that it occupied his whole time, to the exclusion of other business.

The opponents were not idle. In the Glasgow Medical Society Combe's "Essays" were excluded from the library; but Sir George Mackenzie's work on the same subject was admitted. Ministers preached against the doctrine as leading directly to materialism, and consequently to infidelity. In

the Edinburgh Medical Society a member read an essay in favour of the system, which led to a debate, maintained with fervour on either side, until two o'clock in the morning. The crowd was so great that Combe was unable to obtain admission; and when he learned that great ignorance of the subject had been displayed, alike by upholders and opponents, he declared that he would himself speak on the first occasion that offered. Although the names of Gall and Spurzheim were freely used, it was Combe who was to the one party the representative of a new and important system of philosophy, and to the other the apostle of humbug. He remained cool and resolute. The excitement which prevailed in Edinburgh and Glasgow gratified him; for it proved the force of his arguments and the value of the doctrine he advocated.

“Folk are now spreading the most ridiculous reports about Dr Spurzheim. They say that he and Gall have given up their system themselves, and are now laughing at the gullibility of the Scots. They have little reason for merriment on this account, for the Scots have had the full merit of making a determined opposition to the truth. They are spreading also another story, that the German physiologists first believed, but on inquiry they found out the system to be false, &c., &c. These reports serve the enemies when they are losing ground in every other way; but of course they live only their little day.”

Another accusation made by the opponents of Phrenology was, that the system of Gall and Spurzheim was a plagiarism of theories promulgated centuries before and exploded. This charge incited a member of the Society (Sir Walter Trevelyan, of Wallington) to a diligent study of old authors in search of their views on the subject. He found a considerable number of philosophers who had enunciated theories similar in principle to Phrenology, and Combe gave the result of the inquiries in a paper read to the Society. The earliest of these philosophers was Bernard Gordon, a Scots physician, and

professor at Montpellier in 1296. He divided the mind into common sense, sentiment, and memory; he placed the first in the first ventricle, the second in the second ventricle, and the third in the cerebellum. The opinions appeared ridiculous to the phrenologists. Again, in a work on "Memory," written by Ludovico Dolce, and published in Venice in 1554, the drawing of a head was found divided into parts, and different faculties assigned to them very much in the same manner as that adopted by Gall. Combe, in showing the real extent of the coincidence, says:—

"Dolce places 'communis sensus' where the knowing organs lie; 'Imagina' near Ideality; 'Phantasia' near Wonder; 'Cogitativa' at Cautiousness; 'Vermis,' or the organ of maggoty dispositions, at Secretiveness; 'Memoria' at Combative-ness; 'Retentiva' at Destructiveness. This appears to me to have been done almost entirely by the help of imagination, and to have nothing of a scientific character. Gall's discoveries are founded on nature and on a philosophic basis, and his merits will shine with double splendour the more the subject is inquired into."

In April 1821 an attempt was made to play off a hoax on Combe, which, even if it had succeeded, would not have justified the observations made by Christopher North in the "Noctes" two years afterwards. There the hoax is represented as having been successful, and the phrenologists as utterly confounded and condemned out of their own mouths. But the following is the true story of the turnip hoax:—A medical gentleman in Edinburgh (a relative of Dr Gordon, the author of the *Edinburgh* article), with the help of a friend who was a painter, modelled a turnip into the shape of a human head. A cast was taken from this model, and was forwarded to Combe with the request that he would favour the sender with his observations on the talents and dispositions indicated by the head. It was added that the cast was from the skull of a person of an uncommon character. Combe instantly detected the trick, and got Abram, who had some reputation

in his private circle as a verse maker, to write a parody on the "Man of Thessaly," which was pasted on the brow of the cast, and then it was returned.

“ There was a man in Edinburgh,
 And he was wond’rous wise ;
 He went into a turnip field
 And cast about his eyes.
 And when he cast his eyes about,
 He saw the turnips fine ;
 ‘ How many heads are there,’ says he,
 ‘ That likeness bear to mine.’
 ‘ So very like they are, indeed,
 No sage I’m sure could know,
 This turnip head which I have on
 From those which there do grow.’
 He pulled a turnip from the ground ;
 A cast from it was thrown :
 He sent it to a Spurzheimite,
 And pass’d it for his own.
 And so indeed it truly was
 His own in every sense ;
 For cast and joke alike were made
 All at his own expense.”

The author of the attempted hoax called on the following day and assured Combe that he had meant no offence, but only a jest. Combe replied that if the author was satisfied with his share of the wit no feeling of uneasiness remained on the other side. The story was told at the time in the *Caledonian Mercury*, and the laugh was with the phrenologists, not against them. In the "Noctes" the phrenologists are said to have formed a committee and drawn up a report. "In a word, they found out that the illustrious Dr Tornhippison had been distinguished for his inhabitiveness, constructiveness, philoprogenitiveness, &c.; nay, even for 'time,' 'ideality,' and 'veneration.'" This version of the story was published in *Blackwood* so long after the incident occurred that the facts of the case were forgotten by many; but Combe speedily corrected the statement by giving the correct version in the introduction to the first number of the

Phrenological Journal. After explaining the circumstances, he says,—

"A human skull is an object which it is possible to imitate; and if, in the instance in question, or in any other instance, the imitation had been *perfect*, a cast from the *fac-simile* would have been just as completely indicative of natural talents and dispositions as a cast from the original skull itself, supposing Phrenology to have a foundation in nature. There was a lack, therefore, not only of wit but of judgment in the very conception of the trick. If the imitation was complete, no difference could exist betwixt a cast from a turnip and a cast from the skull which it was made exactly to resemble; if it was imperfect, the author of the joke, by his very departure from nature, encountered an evident risk of his design being detected, and becoming himself the butt of the very ridicule which he meant to direct against the phrenologist. This has actually been the result. The imitation was execrably bad, and the cast smelt so strongly of turnip that a cow could have discovered its origin. An experienced phrenologist was the last person on whom the deception could pass; but all heads are alike—all turnips are heads, and all heads turnips, on the showing of the anti-phrenologists."

He had his now large collection of casts arranged in the attics at Brown Square, and there he gave his demonstrations once or twice a week, or whenever any man of eminence in science or philosophy desired to have an opportunity of estimating the value of the system from the exposition and illustrations of its chief apostle. The apartment was prepared for the purpose; it served as a lecture-room, and on high occasions the drawing-room chairs were transported aloft for the accommodation of visitors. But he was at length compelled to limit the number of his lectures. This he did with great reluctance, for his first anxiety was to further the interests of the science. His sister Jean, in this as in many other instances, came to his relief. She had studied the system under his directions; she had observed for herself, and had a clear conception of the whole theory. So, when Combe was tired, she resolved to give the demonstrations herself, and she did so to the satisfaction of her hearers and of her brother.

In the course of his experiments he made singularly few mistakes; but in this year he made one mistake which caused him much annoyance, and afforded his opponents a theme for additional abuse and ridicule. David Haggart, a pickpocket, who, although only nineteen, had obtained considerable notoriety on account of his exploits and repeated escapes from prison, was in the Edinburgh Gaol awaiting his trial for the murder of a turnkey at Dumfries, perpetrated when effecting his escape from that prison about a year previously. Combe visited the prisoner, and in the presence of two gaolers examined his head. The development appeared to indicate much more conscientiousness and benevolence than could have been surmised from the reports of his delinquencies. The great want of Love of Approbation and the full development of Secretiveness seemed the chief defects in the head. Haggart was tried and condemned; he wrote a sketch of his life, expressed his deep regret for the crime he had committed, and solemnly declared that he had never meditated killing the man; his object had been only to stun him. He had, however, deliberately prepared the weapon he used, namely, a stone in a bag, but he said he had only struck one blow. After his execution Combe examined a cast of the skull, and found that he was mistaken about Conscientiousness, which was *small*, not "rather full" as he had thought when he visited Haggart in the prison. He proclaimed his error; but the opponents stuck to the mistake and made much of it. The character of Haggart given by Combe was that of a man delighting in trickery, but not inclined to cruelty. *Blackwood* was satirical on the subject; the *Literary Gazette* declared that craniology had now given the death-blow to craniology. In his Journal Combe writes:—

"1st August 1821.—The spirit of hostility to the doctrine, though buried for sometime, is not dead. The enemies have conceived that Haggart's head is against the system, and have set up a wonderful crowing. This shows how much they must

have been galled by its previous success. Professor Leslie has been incessant in his rejoicing at its supposed overthrow, and has come again and again to Mr Joseph (the sculptor) to rally him on pretending to stick by his belief. This has gone so far, and the sketch published at the end of the (Haggart's) 'Life' has been so imperfectly understood, that even the friends of Phrenology have taken the alarm and regretted the publication. On examining a cast of the head and of the skull I find that I was right in all the characteristic features of the head except Conscientiousness, which is small, whereas I had conceived it to be not remarkably deficient. When this mistake is corrected, the head harmonises with the character in everything."

To the above he added a note in April 1856—

"The method of estimating the size of the coronal region was not then discovered by me, and this led to the error."

Writing to Dr Combe in 1845, in reference to his suffering from the ridicule cast upon him in the course of his career, he refers to the above subject. "The only instance in which I recollect of being deeply and permanently mortified by ridicule was on the occasion of the blunder I made about David Haggart's conscientiousness. The whole of the other tirades, when I was conscious of being essentially in the right, however they might excite a temporary feeling of annoyance, never disturbed my enjoyment of life, never caused me to regret the part I had acted, and never deterred me for one moment from subsequently pursuing the same course."

This one source of mortification was amply compensated by his own success, and by the acknowledgment of his sincerity made by Dr Chalmers and other men of unprejudiced minds. Dr Chalmers persuaded Professor Hamilton of Aberdeen to take the "Essays" and a cast in order to study the system. Dr Spurzheim was lecturing in Paris to a larger number of students than ever; the Phrenological Society in Edinburgh had increased to over eighty members, although, on a motion made by Combe, every new member was obliged to submit to the examination of his head by two phrenologists, and the development had to be considered by the Society previous to

his admission. But the most gratifying of all the proofs that the doctrines were gaining ground was the publication by Dr Abernethy of a pamphlet on the science, in which he "declared decidedly in favour of Phrenology as a system of the philosophy of man." But he feared evil might arise from an incautious use of the physiognomy. "He admits all the fundamental principles of the physiology of the system, speaks in high praise of Dr Spurzheim, and, alluding to me but not naming me, calls me the system's most able and eloquent advocate. The *Literary Gazette* is astonished at this production and seems shaken a little."

In the early part of this year (1821) he had received from Dr Spurzheim the manuscript of his essay on "the Elementary Principles of Education, founded on the study of the Nature of Man," with a request that he would revise it for the press, and make whatever alterations he might think necessary. Combe willingly undertook the task; and after a careful revision of the work he induced Constable and Co. to publish it. The book was favourably reviewed in several magazines, but it did not attract much general attention.

The sale of Combe's "Essays on Phrenology" had proceeded slowly but steadily from the date of issue, and in December of this year there were left in the booksellers hands in London only 58 out of 250 copies, and in Edinburgh 160 out of 500 copies; so that the result of the publication had proved satisfactory in a commercial sense, and most successful in the impetus it had given to the study of Phrenology in this country. This result surpassed the author's most hopeful expectations, and added zest to his labours. He was already thinking of a new edition, and caused a copy of the "Essays" to be bound in two volumes with every alternate leaf blank. On these blank leaves and on the margins of the printed pages he proceeded to note, in his minute clear penmanship, corrections, additions, speculations, and new illustrative cases. Throughout his life he was methodical to a degree in noting

down in its proper place every thought or suggestion which had reference to Phrenology. In this way he accumulated in a short time a large number of observations of the character of individuals, and of the formation of their skulls, which proved valuable to him in his lectures, and enabled him to extend his "Essays" into a System of Phrenology. Few men are able to see reason in objections to their own settled convictions; Combe was so far one of the few that he honestly endeavoured to see the reason of his opponents from their point of view, and he treated their arguments with respect. He always had an answer to them; but he did not answer without consideration; and his sincerity is apparent in the deliberate manner in which he noted everything that might tell against the philosophy he advocated, and in his frank acknowledgment of error whenever it became clear to him.

CHAPTER VIII.

1822-1824—PHRENOLOGICAL SOCIETY'S HALL—COMBE'S COADJUTORS—REV. DAVID WELSH, D.D.—PHRENOLOGY AN ESTIMATIVE SCIENCE—METHOD OF INVESTIGATION—UTILITY OF THE SYSTEM—FIRST COURSE OF LECTURES—WILLIAM HAZLITT—PREPARING LECTURES—INVITATION TO LECTURE IN LONDON—REV. GEORGE CROLY—TRANSACTIONS OF THE PHRENOLOGICAL SOCIETY—THE PHRENOLOGICAL JOURNAL—OWENISM—EDUCATION—PHRENOLOGY IN LONDON—IRELAND AND ITS PEOPLE.

COMBE had purchased a building in Clyde Street, including the hall in which Spurzheim had lectured during his visit to Edinburgh in 1816. Here, after several changes of quarters, the Phrenological Society found a suitable meeting place, and the session of 1821-22 was a successful one ; the essays and discussions excited much interest in the town, and the number of its members, amongst whom were divines, doctors, lawyers, and tradesmen, continued to increase, to the delight of the founder. He had one source of regret, however ; few of the members were practical phrenologists. The majority listened, appreciated and approved the expositions of the science, but they made little effort to prove its truth by methodical practice. Another source of regret was that various members were shy of making any public acknowledgment of their adherence to the new doctrines lest such an acknowledgment should prove injurious to them in their professions. Others maintained silence, lest they should incur the ridicule of their friends ; and a few, whilst admitting the general theory of the science, delayed an expression of entire faith in it until they

should be satisfied by additional testimony as to its truth. Combe never lost heart; he had calculated that the progress of Phrenology would be slow, and he found that the progress already made had exceeded his calculation considerably. The Society's collection of casts and skulls was placed in the hall, and was open to the inspection of members and their friends on Saturdays, so that even those who were merely curious on the subject might have opportunities to learn something of the nature of the science; at other times the collection was open to members only, so that they might have undisturbed leisure for study and observation. He never lost confidence that truth would prevail, and he worked energetically to hasten the arrival of the day of victory.

He had four able and sympathetic coadjutors in his work, with whom he was in frequent communication. The Rev. David Welsh,* Crossmichael, who became the most influential defender of Phrenology against the charge of materialism; Dr Richard Poole, editor of the *New Edinburgh Review*, who, Combe wrote, "stands in the breach between phrenologists and their opponents;" Sir G. S. Mackenzie, and Dr Combe. With these gentlemen he discussed the results of every new observation; submitted cases for their examination and

* Rev. David Welsh, D.D., born 1793; appointed minister of Crossmichael, 1821; of St David's, Glasgow, 1827; obtained the chair of Church History in the Edinburgh University, 1831; became Convener of the Church Colonial Committee in 1841, and Secretary to the Scotch Board of Control and Revision of the Bible when the monopoly of printing was abolished. He was Moderator of the General Assembly in the year of the Disruption. It was he who read the Protest to the High Commissioner, and led the way from the Assembly Hall, followed by the Revs. Dr Chalmers, Dr Gordon, and others, to the temporary hall which had been prepared for them. He there proposed the appointment of Dr Chalmers as the first Moderator of the Free Church General Assembly. He took an active part in founding churches, schools, and the Free Church College, in which he became Professor of Ecclesiastical History. He had been in feeble health for some years, and he died in 1845, the excitement attending the Disruption having, no doubt, hastened his end. He was the author of the "Life of Dr Thomas Brown, Professor of Moral Philosophy," "Sermons on Practical Subjects," &c.; and he was for some time editor of the *North British Review*.

criticism, and carefully weighed and compared their experiences with his own. Where they disagreed, he sought by additional examinations of skulls and casts to satisfy himself whose conclusions were the best supported by the greatest number of cases; and although once having adopted an opinion he clung tenaciously to it, he did not hesitate to acknowledge error when the proofs were against him.

From the first he disclaimed any intention to lay down unalterable laws, and deprecated the attempt which was often made to show that phrenology must be false because he or Gall or Spurzheim had been occasionally mistaken in their observations of character. "Phrenology is not an *exact*, but an *estimative* science,"* he said; and his method of investigation, notwithstanding his enthusiasm, was calm and systematic.

"I resorted to the practice of selecting only decided characters as the objects of the earliest observations. I compared the forehead of one individual who was remarkable for intellectual deficiency with that of another who was remarkable for intellectual superiority. The difference was so great, and the coincidence betwixt talent and full development, and

* I define science to be a correct statement, methodically arranged, of facts in nature accurately observed, and of inferences from them logically deduced; and add, that there is a difference between science and *established* science. When Newton published his discoveries regarding the composition of light, he recorded scientific truth, but his statements were at first denied and opposed; next they were discussed and tested; and it was only after a number of individuals, commanding public confidence by their talents and attainments, had concurred in testifying to their truth, that they were admitted as *established*. From the first they were *established in nature, but not in human opinion*. The more difficult of proof a science is, the longer will be the time which will elapse before it is admitted as established. Phrenology is not an *exact*, but an *estimative* science. It does not resemble mathematics, or even chemistry, in which measures of weight and number can be applied to facts; but being a branch of physiology, it, like medical science, rests on evidence which can be observed and *estimated* only. We possess no means of ascertaining, in cubic inches, or in ounces, the exact quantity of cerebral matter which each organ contains, or of computing the precise degree of energy with which each faculty is manifested; we are able only to *estimate* through the eye and the hand the one, and by means of the intellect the other.—*Introduction to "A System of Phrenology."*

betwixt incapacity and imperfect development so uniform that it was impossible to mistake the characters or doubt their connection with the forms. In the same way with regard to Feelings, I compared the heads of persons who were remarkable for cautiousness and timidity with the heads of others remarkable for precipitancy of conduct; and in these cases also the differences were so conspicuous, and the concomitance betwixt the sentiment and the development so steady, that it was impossible to entertain a doubt upon the subject. The same course was followed with the faculties of Benevolence, Firmness, Self-Esteem, and others, the organs of which are large; and the same irresistible conviction invariably followed."

He proceeded in the same manner to study the smaller organs; to contrast developments of the skull with the known dispositions of the characters; to accumulate the results of his own practice and to compare them with those of others; and whenever a development was discovered in which the organs failed to indicate any one of the faculties which the individual manifested in action, he did not rest until he had satisfied himself by repeated experiment that the observations had been inaccurate, or found the particular development repeated in other heads whose owners displayed the same faculties, and this in a sufficient number of cases to establish the situation of the organ. At length "each individual appeared, on the most transient glance, to have a form of head as peculiarly his own and as easily distinguishable as the features of his face. The practice of tracing actions to motives also gave increased facility in discriminating dispositions and capacities; and human nature was found opening up under the eye by the most fascinating yet sure and instructive mode of philosophising."

The utility of the system, as it appeared to him in guiding and controlling human nature, in elevating the character of man by a proper direction of his energies, in ameliorating the condition of the insane, and in providing an explanation of the

problem as to the treatment of the criminal classes, was more than enough in his eyes to justify his enthusiasm and devotion. The following is a passage from one of his early essays :—

“The utility of Phrenology consists in this, that it gives us a clear and philosophical view of the innate capacities of human nature, and of the effects of external circumstances in modifying them. It points out the manner and extent in which individuals may differ from each other in their natural capacities of feeling and of thinking. It presents to us also an interesting view of the apparent connection betwixt the immaterial and material parts of man; and it explains the causes of the varying phenomena which the immaterial principle exhibits in its manifestations as the state of the body changes from infancy to old age, and from health to disease. In short, it reduces the philosophy of man to a science, by showing us the number and scope of human faculties, the effects of their different combinations in forming the characters of individuals, and their susceptibilities of modification. Its tendency is to make us acquainted with ourselves and indulgent to our fellow-creatures, for it teaches us that no individual is a standard of human nature; and that those whom we are prone to condemn for differing from us in sentiment may have as good a right to condemn us for differing from them, and to consider their own mode of feeling as equally founded in nature as we consider ours.”

His reputation was already extending beyond his native shores. Very gratifying indications of his growing influence reached him at intervals from Paris, where some of his articles were reproduced in *Galignani*, and from America. Dr Charles Caldwell, professor of physiology at Lexington, and afterwards at Louisville, during a brief visit to Europe, had met Dr Combe, and corresponded with George, although unable to meet him. He was interested in phrenology, and carried with him to the United States a number of casts and phrenological works supplied by George, or under his direction. Dr Caldwell studied the science, and became one of its most earnest upholders. In Philadelphia a circle of medical gentlemen established the Central Phrenological Society, and the vice-president, Dr William E. Horner, wrote to Combe, without

introduction, and simply because he was regarded as the chief apostle of the system, asking him for counsel, and to select a suitable series of casts to be forwarded to the American Society. The service asked was cheerfully rendered, and the leading office-bearers of the Philadelphian Society were, after a time, placed on the lists of the Edinburgh Society as corresponding members. One of these members, Dr John Bell, edited the first American edition of Combe's "Essays," with an additional chapter on the anatomy of the brain.

Combe early in this year (1822) expressed a desire to acquire the art of dissecting the brain himself; and of the importance of being able to do so he became daily more impressed. In the course of little more than a year he was able to say that he had mastered the chief difficulties in this delicate operation. In February he announced his first course of lectures, to be delivered to the Phrenological Society in their hall in Clyde Street, beginning in May and ending in July; members to be admitted gratis, and strangers to be charged two guineas for the course. He proposed, if this first attempt should prove successful, to announce a winter course, beginning in November. He felt that he had a vocation to speak in public, and he had often secretly lamented that fate had not placed him at the Bar instead of at the desk. He had other motives, too, ambitious but natural ones. Professor Wilson's repeated attacks on the system "inspired him with an ardent desire to take revenge in the only way in which an honourable mind could possibly do so, by carrying the tide of public favour towards the system which he has so grossly maligned. Ten years, nay, twenty will glide away, and if the victory is not achieved in that time, be mine the mortification."

He was not in good health at this time, and yet he was carrying on the work of three average men. His professional affairs had first to be attended to, and he had found these so largely augmented that he was compelled to employ an additional clerk; then he had a private correspondence, chiefly

regarding phrenology, which was very considerable; he was writing for the *New Edinburgh Review*, and he had to prepare his course of lectures, besides the demand made upon his time by social duties, which he always endeavoured to fulfil, regarding them as part of the business of his life. He accomplished all satisfactorily, and he attributed his ability to do so to the careful regimen which he adopted, and especially to the strict limitation of the quantity of liquid, whether tea, ale, water, or wine, of which he partook.

His desire to impress upon all students of phrenology the distinction between the science and the professors of it, is clearly expressed in a letter to a member of the Society who had erroneously reported, at second hand, a statement supposed to have been made by Combe as to the character of a man, drawn from his development, which was found to be essentially wrong in one particular. Combe was unable to recall the incident referred to, and the author of the report apologised, owning that his information must have been incorrect. Combe answered:—

“I write again merely to express my sentiments on one point stated in your letter, namely, that the public visit my mistakes, real or pretended, against the science itself, and that on that account you reckon it of some importance to bring under my notice the errors which are alleged against me. Allow me to observe that in doing so the public makes me of much more importance than sound philosophy warrants; for as phrenology professes to be a science of facts, its truth is as little dependent on me, or any individual, as astronomy is on Professor Leslie, or chemistry on Dr Hope. . . . I am aware that in the present state of phrenology the public is more disposed to speculate on what Dr Gall says, or Dr Spurzheim says, or any other phrenologist says, than on what nature reveals; and this is the greatest obstacle to the progress of the science. Now, it appears to me that the friends of the doctrine would serve it most essentially by breaking down this personal connection betwixt the science and its disciples, and directing the public mind as much as possible to nature. What I mean by this is, that when you hear reports of what I said or did, or any one else said or did,

you should ask the objector to accompany you to the fountain of truth—the skull or development itself—and then let him depend on his own judgment. I shall grudge no trouble in satisfying such inquiries, and no phrenologist need fear the result of them.”

The following extracts are from a letter to the Rev. David Welsh; they give a sketch of the development of William Hazlitt from the phrenologist's point of view, and show the manner in which Combe prepared his lectures:—

“10th May 1822.—I met Hazlitt in Ritchie's at supper. He appears to be about forty. He drank no wine or fermented liquor, but an enormous quantity of tea. He mentioned that he had hurt himself by drinking too freely, and had given up all strong potations. He is short and of a moderate thickness. His head, so far as could be seen, appeared to be as follows:—Constructiveness, large; Covetiveness, do.; Ideality, do.; Conscientiousness and Firmness appeared to go down from Veneration and Hope, which, with Benevolence, were pretty distinctly seen, and seemed to be large. Love of Approbation seemed to be large; Individuality, lower large, upper full; Form, full; Size, large; Colouring, do.; Locality, full; Order, large; Time, full; Number, do.; Tune, large; Language, do.; Comparison, very large; Causality, full; Wit, rather large; Imitation, large, and Wonder, large—these two seen from the way the hair was combed. The forehead retreats slightly but is decidedly capacious, and as the face is small it has a fine effect. The expression of the eyes is that of benevolence, veneration, hope, and ideality. The mouth indicates combativeness and destructiveness; lips thin and sharp. When he talks the manner is bland and destitute of ostentation; clear rather than vehement or sparkling. When he laughs the features become cuttingly sharp. He is a well-bred man, does not monopolise conversation, listens with attention and interest to any one who speaks, and affects nothing. The sparkling coruscations which gleam in his works are to be traced in his conversation; but they require to be looked for to be discovered, for the manner is so smooth and they flow so much in the current of his ordinary thoughts, that they do not attract attention by their prominence in delivery. If you pause in the conversation and reflect on what has been said during the last five minutes, you perceive that you have been talking with an uncommon man. I left him at half-past one, and he was still sitting. . . . Hazlitt is gone to Glasgow to lecture on the poets

of Queen Elizabeth : he has actually got his published lectures in MS., and means to read them, trusting to the people's ignorance of literature for escaping detection. I had some scruples about lecturing after publishing, but I shall fall far short of this. Indeed, seven-tenths of my lectures will be new. You think that I must be wondrously busy. I rise an hour earlier, that is at eight instead of nine, and write a lecture a week in this hour, and have the rest of the day uninterrupted. I have finished nearly nine lectures, and sixteen are all that are required. I shall have eight weeks to write the other seven, and this is very easy work."

He delivered his first lecture on the 14th May. He had invited Dr Barclay and Principal Baird to attend, but they were unable to do so on account of other engagements. He had an attentive audience of about seventy at his introductory lecture, which dealt chiefly with the attempts made by metaphysicians to discover the philosophy of the mind, an explanation of their failure, and its causes. At the second lecture he had an audience of about sixty-five, and in it he referred to the efforts of physiologists to discover the functions of the brain, and endeavoured to explain the causes of their failure. In the third lecture he treated of the senses to about thirty-two persons ; and in the following lectures he proceeded with the examination of the brain on phrenological principles contrasted with those of the metaphysicians and physiologists. Dr Combe had returned to Edinburgh at this time, and he rendered important assistance to his brother by dissecting the brain of an ox or a sheep to a successive class of ten of the auditors of the lectures. When all had witnessed this preliminary demonstration of the form of the brain in the lower animals, he dissected the human brain before the united classes. In these demonstrations Andrew only dissected, being still too diffident to speak in public, and George gave the expositions. The number of tickets issued had been forty-four, only three of which were given away as a matter of ceremony, including the two to Dr Barclay and Principal Baird, and he calculated upon a regular attendance of between twenty and

thirty. He was gratified to find that the average attendance was between thirty and forty. The system was much talked about in the scientific and social circles of the city, and the lectures, besides affording great pleasure to himself, had the effect of attracting a large measure of serious attention to the subject and of adding to the ranks of its disciples. He consequently announced a winter course, to begin in November.

From Mr James Deville and Mr Bryan Donkin, phrenologists, friends of Spurzheim, and the chief producers of casts in London, he received invitations to visit the metropolis and to lecture there. He at once dismissed the proposal as impracticable. But the idea assumed importance when the suggestion was repeated by Dr John Elliotson, president of the Royal Medical and Chirurgical Society, and lecturer on the practice of medicine at St Thomas' Hospital. After deliberation, he replied that he did not presume so far on his own skill as to think himself qualified for the proposed task. He hoped that, as Dr Spurzheim could not afford to desert his practice in Paris, time would produce an instructor. He did not, however, entirely abandon the idea of the possibility of some day being able to lecture in London. He was cautious, clear-sighted, and took a fairly accurate measure of his own powers and position. When Dr Elliotson repeated the proposal at the end of the year, he replied:—

“16th December 1822.—If my appearance in London would benefit the science, I certainly would make an effort to go there; but as it would make a considerable inroad on my professional practice, and be attended with other serious inconveniences, I would not like to proceed upon a venture. I could be in London on 16th March and lecture six days a week for a month, provided you are quite *certain of procuring* such an audience as would really give the science a lift, say, fifty at least. Were I to set out on a pompous pilgrimage to London, and have only twenty or thirty hearers, the cause would be injured, and my reputation here diminished on my return; so that the matter should be very seriously considered before proceeding to such an undertaking. Dr Willis spoke of the possibility of procuring the lecture-room of the

Royal Institution. Would you be so good as consult Mr Donkin on the subject, and let me know his opinion on the whole affair? It is proper to inform you that I am by no means a popular lecturer here. This is my first public course (the winter course), and only nineteen attend; and, therefore, do not deceive yourselves as to what I am able to perform. These nineteen appear interested, and are most regular in their attendance; but still nineteen is a very small portion of the population of Edinburgh; and no *vox populi* would accompany me to London to excite curiosity or command respect there. Again, therefore, consider that a failure would be truly a serious matter, if not to the science, at least to me individually, and do not proceed on the dictates of 15 (Hope), but upon those of 30 (Comparison) and 31 (Causality), regulated by 12 (Cautiousness)."

His discretion was justified by the result of the inquiries which were set on foot. His London friends discovered that they could not guarantee a sufficiently large audience to make the experiment worth trying; and so, for the present, the idea of a course of lectures in the metropolis was abandoned. In other ways, however, he succeeded in reaching the London public. The editors of the *London Magazine* and of the *Medical Journal* opened their pages to a defence of the system. George contributed to the first-named periodical, and Dr Combe to the second. The tone of their essays was moderate, and their effect considerable. In writing for these magazines, the brothers stipulated that the editors should not print any note disclaiming the opinions advanced in the essays, and this was agreed to. One of the first reviews which Combe wrote for the *New Edinburgh* was on William Tennant's "Thane of Fife." He had formed an estimate of the character of the poet from the poem, and when introduced to Tennant, who was then master of the Dollar School, he found that his estimate was essentially correct, and accorded with the development of the author. His verdict was, and time has proved its justice, that "Tennant may write pretty or ludicrous verses, but I fear he will never be a great poet."

He was frequently requested to examine the heads of men

who afterwards attained distinction, and it is remarkable how seldom he erred in the estimate of their character. The Rev. George Croly visited him, and the following is a report of the interview addressed to the Rev. D. Welsh, 12th September 1822:—

“James Simpson, advocate, brought the Rev. George Croly to me after you left us. He is the author of ‘The Angel of the World,’ ‘Cataline,’ &c., of which you must have heard. His development is as follows:—

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Amativeness, full. 2. Philoprogenitiveness, large. 3. Inhabitiveness, or Concentrativeness, very large. 4. Adhesiveness, full. 5. Combativeness, large. 6. Destructiveness, rather large. 7. Constructiveness, moderate 8. Covetiveness, moderate. 9. Secretiveness, large. 10. Self-Esteem, full. 11. Love of Approbation, large. 12. Cautiousness, large. 13. Benevolence, do. 14. Veneration, full. 15. Hope do. 16. Ideality, large. 17. Conscientiousness, rather full or moderate. | <ol style="list-style-type: none"> 18. Firmness, large. 19. Individuality, lower large, upper rather full. 20. Form, large. 21. Size, large. 22. Weight, large. 23. Colouring, large. 24. Locality, full. 25. Order, large. 26. Time, full. 27. Number, full 28. Tune, do. 29. Language, large. 30. Comparison, large. 31. Causality, large. 32. Wit rather full. 33. Imitation, large. 34. Wonder, rather full. |
|---|---|

Measurement from No. 2 to lower 19, $8\frac{5}{8}$ inches; from middle of ear to do., $5\frac{2}{8}$; from middle of ear to No. 2, $5\frac{2}{8}$; from do. to No. 18, $6\frac{8}{8}$; from No. 12 to No. 12, 6; from No. 16 to No. 16, $5\frac{1}{8}$. Superciliary ridge very prominent, forehead slightly retreating.”

“He came into the room quite full of jokes and laughter, as if the whole affair were ridiculous and I a great gull (he is a writer in *Blackwood*). I told him in an instant that if he meant to make jokes he should make good ones, and that I feared, judging from his head, that he would excel more in other mental manifestations than in those of wit. This quieted him, and he allowed me to proceed with great deliberation. When the development was written down, I told him that he conceived himself very difficult to be seen through, but that I knew him better now than many of his most intimate associates. Half startled and half ashamed at being so, he passed the matter off and departed. I gave the development to Andrew, who had never read a word of his works and had

not seen him, and he drew an admirable sketch of his character. This was sent to Mr Simpson, and by him given to Croly, who admitted it to be all true. Simpson said that he had left me with the impression that I was an enthusiast: he came with the belief that I was a fool; the two characters are not far distant. Croly's large 11, 9, and 5 play the deuce with him. He affects smartness and a contempt for seriousness, all I believe from false notions of greatness. Observe how large the head is, and how large 3 is—and there is great concentration in his writings."

If Combe appears in the foregoing to have been somewhat abrupt in checking the apparent levity of his visitor, it must be remembered that he regarded phrenology with earnest faith, and to make a jest of it was to be most offensive to him. Besides the examinations made by himself, he was frequently requested to make an estimate of character from developments drawn up by his numerous disciples, and this he found a difficult and unsatisfactory task, for many reasons. He was averse to sketching dispositions from a development not taken by himself, "as a shade of difference in the proportion of the organs would materially affect the result." He explains his objections more fully in writing to Sir W. C. Trevelyan.

"18th October 1822.—I am very unwilling to deny you any request, but at the same time you could scarcely make one which would be less acceptable than to draw a character. The sketch itself is difficult, the chances of error are numerous, and my skill is positively small. Errors and every misconception are visited first on my head and then on the science, and no argument is listened to in explanation of the causes of the mistakes. Besides, characters appear differently to different individuals, some persons possessing in themselves faculties apt to fire at certain faculties in others; while other individuals having these faculties in a small degree do not feel the least annoyance, and, nevertheless, every one judges of his neighbours according to the impressions they make on himself; and if the phrenologist misses the point where the rubbing is felt, his portrait is immediately pronounced to possess no likeness to the original. To ensure accuracy, therefore, the question ought to be put, in what light does A, possessing a certain development, appear to B, possessing

another given development. Do, therefore, accept of the annexed as an attempt only, and not as a finished production, and send me a *detailed* account of what is erroneous, for it is only by learning errors that improvement can be made."

It was the eagerness with which the opponents took advantage of the slightest mistakes to condemn the whole system that caused him to be chary in drawing character from developments not taken by himself. The error was loudly proclaimed, but the circumstances under which it was made were rarely considered. "No development," he wrote to another correspondent, "can go to harm the system if *all the truth* be known, for nature is never inconsistent with herself; but a mistake of a lock of hair for a full Conscientiousness would certainly foster prejudices, and ought to be avoided." It was with prejudices that he was constantly doing battle, and he found them most difficult to overcome. He dealt with them sharply and sometimes contemptuously, but serious argument he always treated with respect and moderation, and this was acknowledged by all his opponents. He was naturally calm and deliberate, and this spirit enabled him to pass through the storms of controversy without any display of temper. Emotion was rarely manifested in his outward conduct; and at times he appears to have had some regrets on this account. Writing to the Rev. Mr Welsh, 5th May 1823, on the sources of laughter and crying, he says:—

"Grave as I always was, I well remember being forced to smile when unexpected praise was bestowed upon me; and, by the way, I may mention that I was once on the very brink of crying from the same cause, although from a horrid stoicism of constitution I have never shed a tear since I was a child. The occasion was an unexpected expression of gratitude made by a near relation in the very moment of death. I had watched the fading taper of life, and seen it gradually approaching to extinction with every variety of internal emotion, but without a tear. On this unexpected address to my Love of Approbation, however, the tear started in my eye, but never dropped."

Notwithstanding this outward stoicism, his affections and friendships were deep and constant. They were like his convictions; once formed, he held to them with stubborn tenacity in good and ill report. It was as much owing to the slowness with which he formed attachments as to phrenology that he was seldom mistaken in the character of his friends. For Mr Welsh he entertained deep feelings of regard. This is shown in the following letter, which also explains his own position at the time:—

“16th July 1823.—To receive a letter from you has become to me not merely a luxury but a necessary of life; and as I cannot procure it without writing to you I am actuated by this very selfish motive in sending you the present epistle. The session has kept me in a constant turmoil, and although the wish to write you frequently occurred, the power of doing so was wanting till now. Do you know that without one single thought upon the subject, or effort beyond merely executing faithfully, to the best of my ability, such business as was put into my hands, I see myself almost in the way of becoming rich? Year after year professional employment has increased upon me, and now I have two clerks and an apprentice, all of whom, as well as myself, have been very busy up to the rising of the Court. It is curious and even lamentable how the love of the world grows upon us; for when I spent as I made, no thought of the future ever crossed my mind; and now when circumstances present the means of saving from £200 to £300 a year, a more selfish tendency is threatening to arise, a feeling as if a good store of wealth were a very excellent thing, and the notion of living for a number of years also frequently presents itself, while, till within a very short time, the expectation of a speedy adieu to this world was the impression under which I habitually lived. Better health and greater vigour may have occasioned the latter idea, but I fear an increasing activity in Nos. 8 (Acquisitiveness) and 10 (Self-Esteem) must be charged with the former. I mention these matters just because I know that you will rejoice in my prosperity, and to show you that my continued and public phrenological efforts are neither diminishing my professional exertions nor abating the confidence of my employers.”

His third course of lectures began in May 1823, and in the

beginning of that month he had no idea how many students would appear; but he was determined to go on if he should only have one hearer. He had calculated upon having to lecture for five years before he should attract a moderately large class. He was, however, attended by an average of twenty students, amongst whom were two orthodox clergymen, and ten visitors. They were all new faces, and this fact suggested to him that the numbers of those who attended out of mere curiosity were decreasing, and that he was at length reaching those who were capable of taking a serious interest in the subject. Besides the lectures, he was now engaged in arranging for publication the "Transactions of the Phrenological Society," consisting of papers written by the chief members of the Society, and of some of the more important essays read during the winter session. He made strenuous efforts to have the "Transactions" ready by the end of 1822, but this he had found impracticable, as several of the contributors were too much occupied with other affairs to complete their papers in time. He had so much material of his own ready that he purposed using it, with other essays, as a second volume of his "Phrenology," when the new edition appeared. He had the satisfaction, however, of seeing the first volume of the "Transactions" completed in the autumn of 1823. An Edinburgh bookseller, Mr John Anderson, paid all the expenses of production, amounting to nearly £200, presented the Society with a bonus of £20 besides, and was well pleased with his bargain. A hundred copies were shipped to London, and all were sold before arrival, so that a pressing order for another supply was sent to Edinburgh. The volume contained an introduction by George Combe, giving an historical account of the origin and progress of phrenology, and thirteen other essays. He also wrote the first article, "Outlines of Phrenology," giving a condensed view of the leading doctrines of the science; an analysis of the "Maxims of Rochefoucault" on phrenological principles (this he had once thought of

publishing as a separate work, with a new translation of the "Maxims"); a report upon the cast of Miss Clara Fisher, a theatrical prodigy, who at the age of nine played Richard III., Shylock, Falstaff, &c. ; and he supplied a number of illustrative cases to the essays of other contributors. Dr Combe wrote two articles,—one, "On the Effect of Injuries of the Brain upon the Manifestations of the Mind," and another entitled, "An Answer to Dr Barclay's Objections contained in his Work on Life and Organisation." The principal other contributors were Dr R. Poole, William Scott, W.S., A. Carmichael, Dublin, and Dr G. Murray Paterson, who gave an account of the phrenology of Hindostan, the result of the examination of about 3000 Hindoo heads.

The success of this publication gave him the more confidence in proceeding with another project upon which he had long meditated, namely, the issue of a quarterly journal devoted to the advocacy and defence of phrenology, in which the attacks of other periodicals could be answered from a purely phrenological point of view, and the progress of the science recorded without the restraint which it was necessary to observe in writing for periodicals appealing to general readers. As with the "Transactions," he had to encounter doubt and hesitation on the part of his most able co-adjutors. Few were willing to act so boldly as he had done in openly carrying on a crusade against the opponents of phrenology. There were some men of ability, sincere friends of his, who were ready to proceed quietly in the investigation of the principles of the new science, but yet hesitated or declined to become its declared advocates. He respected this hesitation, although he found it difficult to understand; for he had no doubts on the subject: this was shown in his "Essays" and in his "Outlines"—a small work intended for beginners, and issued in 1821. He had, however, a number of followers who were almost as enthusiastic as himself; and, backed by them he obtained, in May 1823, estimates for the printing of the

Phrenological Journal. In December of the same year he had the satisfaction of seeing the first number published. The responsibility and expense of the publication were shared with him by Dr Combe, Dr R. Poole, Mr William Scott, W.S., and Mr James Simpson. Dr Poole edited the first four numbers, after which he ceased to have any connection with the work. The remaining four proprietors then undertook the editorship jointly; but George and Andrew Combe were practically the editors of the next seventeen numbers, the task of selection and arrangement being almost entirely left to them. The introductory statement of the first number contained a vigorous assault upon the enemies of the system, and a ruthless exposure of their misrepresentations of its principles. Combe only wrote one paragraph of this introduction, giving an explanation of the "turnip head" incident. His chief contribution was the substance of a lecture he had delivered to the Society on "Materialism and Scepticism."

The *Journal* was serviceable to the cause of phrenology, but it did not create any profound sensation. Its existence, and the knowledge that mistakes would be exposed in its pages, rendered the antagonistic philosophers of Edinburgh more careful in their denunciations of the system; and, combined with the influence of the "Transactions," it obtained for the science more serious consideration on the part of the general public than had been given to it hitherto. But the *Journal* never became sufficiently popular to prove a commercial success. It was started through disinterested zeal for the cause, and in the same spirit it was carried on for twenty years at the cost of much time and labour to the proprietors and contributors; for all worked gratuitously. At its best period the sales did little more than suffice to defray the expenses of paper and printing. Mr Scott seceded from the *Journal* on the publication of No. XXI.; and the three remaining proprietors continued it till the conclusion of the first series with the fifty-third number. In this they were

greatly assisted by one of Combe's nephews, Mr Robert Cox, who was the active editor of the magazine from No. xxxiv. to No. L., and contributed sixty able articles to its pages, besides innumerable short notes and reviews. A second series was commenced by Mr Hewett C. Watson, Thames Ditton, and the publication transferred to London. At the end of three years Mr Watson retired; the copyright was purchased by Combe; and Mr Robert Cox resumed the position of editor, which he retained till the *Journal* was discontinued with the completion of the twentieth volume in 1847.

But in 1823 Combe did not feel disheartened by the uphill struggle and the countless irritations and inconveniences involved in the management of a magazine, especially when the magazine appealed to a limited public. His enthusiasm gave force to his practical method of propagating the system. He did not expect to gain commercially by the *Journal*; he counted only upon its influence in diffusing a knowledge of the science which he believed to be of so much importance to humanity, and he never expressed a regret for the time and money which he gave to it. Phrenology had become not only his hobby but a part of his life, and he was ready to sacrifice anything to further its interests. He saw in it what Reid, Stewart, Brown, and others had sought and failed to find; and he believed that the mysteries of nature and human conduct were to be definitely revealed by its light. With a slow and questioning spirit he had passed through all the stages of curiosity, interest, then observation and careful reasoning on the facts presented to him by physiology, philosophy, and his own investigations, until he felt satisfied that he had arrived at conviction by strictly logical deductions. He applied the principles of phrenology to all the incidents of life: to the selection of a tutor for a friend; to the selection of a servant for himself; and to the direction of the studies of his nephews and nieces, and of the children of his friends. He had been long meditating the application of the system to

education on a larger scale; and, writing to the Rev. D. Welsh on 4th October 1823, he gives the first hint of the educational theories which he afterwards developed into a system. For several years he had given much attention to the method of education adopted in Robert Owen's New Society at New Lanark; this will explain the opening passages of the letter.

"In Owenism there is a good deal of truth which might be most beneficially applied in old society, and it is only his principles being carried to excess that renders his doctrines ridiculous. 'Nature and circumstances,' says he, 'make us what we are.' Nobody can dispute this; 'therefore,' he continues, 'we ought to exert ourselves to prevent misery and vice, and on no account ought we to be angry with either, because the transgressor cannot help his misdeeds.' The one part of this proposition is sound, the other is questionable, even although his premises were granted. A child ignorantly eats unripe fruit; it cannot help its ignorance, but nature nevertheless punishes it with pains in the digestive organs; these on the principle of necessity become motives to induce it not to eat unripe fruit again. So a scoundrel under the influence of 5 (Combativeness) and 6 (Destructiveness) abuses his neighbour: grant that he cannot help doing so if not opposed; yet the aspect of rage kindling in his neighbour's eye, to be discharged in a sound beating of his person, will afford a motive which may enable him to subdue his tendency. In the last place, Owen says, 'that by circumstances judiciously arranged, all the tendencies of nature may be so directed as to find gratification without producing abuses.' This is the hinge of the whole, and here his arguments, or rather prophetic assertion, fail to convince. . . .

"I visited Lanark last week with Dr Willis. I asked Owen how the children were taught morality in his system, independently of the Bible and Catechism (the former of which, by-the-by, I saw them reading). He said that in learning the history of Alexander the Great, for example, they were asked, 'Why was he called great?'—'Because he conquered many nations.' 'What do you mean by conquering?'—'He slew all those of the nation who opposed him, and compelled the rest through fear to submit to his will.' 'What do you call a person who kills one man because he opposes him?'—'A murderer.' 'What is the difference between Alexander and a murderer?'—'Alexander slew thousands and a murderer kills few.' He selects flagrant

instances of other crimes and treats them in the same manner. I asked him whether his scholars were made acquainted with the vices of old society, so as to guard against them? He said, 'no; that they would be soft and in danger for a time till they discovered them by experience.'

"My notions of education are as follows:—Take Alexander as an example; teach the children phrenology; then tell them that he must have had a large head—that this gives great power of mind—that since power is an object on which we look with delight, and naturally subjects weaker minds to its sway, Alexander must also have had extensive powers of reflection, because in an age comparatively rude he organised a great force, and employed it on regular principles in the conquest of foreign nations. That it is to these qualities he owes the appellation of great, which so far was justly given; but that he must have had 5 (Combatiiveness), 6 (Destructiveness), and 11 (Love of Approbation) enormously active, without subjecting them to 13 (Benevolence) and 17 (Conscientiousness), and hence employed his greatness in creating misery, and that in so doing he deserves detestation. That in the age in which he was first called great, vigour of mind was more valued than morality; but that in a purer period he would be looked upon with pity or detestation. That he differs from a common thief and robber in possessing the qualities of energy and comprehensiveness, but in nothing else. By means of phrenology, also, you can prepare them admirably to encounter the wickedness of the world without contaminating them by initiation; explain to them the abuses of the faculties, and the characters produced by different combinations; they will then go into the world quite aware that rogues exist as well as honest men, and the principles communicated will give them tact in detecting villiany.

"In the next place I would explain to children the laws of nature. Spurzheim's book on education explains this. Let them see from infancy the real situation in which they stand as created beings; and point out to what extent they are the arbiters of their own fate, or at least how conduct and happiness are joined. They ought, in addition to the natural sciences, to which *Owen's Symbolical Instruction** is confined, to be taught the principles of hygiene or dietetics, of political economy, and of the law of the country in which they live. I see great suffering produced from want of a slight knowledge of this last kind, which might be given in a few pages and

* A series of pictures illustrative of Zoology, &c.

made quite intelligible to youths below seventeen. Finally, the use I would make of religion is this: having explained nature's laws, I would lead them up to God; in obeying His laws you obey Him. If children have not 30 (Comparison) and 31 (Causality) sufficiently strong to see the advantages of obedience, perhaps they may have enough of 14 (Veneration) and 15 (Hope) to venerate the laws and to yield obedience on account of the lawgiver, and to expect in the spirit of faith that reward which they cannot realise by positive perception. This would not exclude the duties of repentance, prayer, and praise; nor ought the view of good and evil to be limited to this life. At present half the benefits of 14 are lost to practical results."

The hope grew upon him that one day he might be able to devote his entire time to the advancement of education. This was a philanthropic vision of which he was almost afraid when it first appeared to him. Addressing Dr Welsh again, he says: "my views in regard to phrenology are daily extending. I intend to write lectures showing its application to morals, criticism, and political economy; and in two years more I shall probably lecture three or four times a week for five months, and charge three guineas. If I could realise as much money as would yield me £300 a year of independent income, I would retire from business and lecture and write on phrenology as my constant occupation, and set agoing a school on the principles mentioned. If the same success attend me in future, I could do this seven years hence; but somehow or other I feel it a sin to look forward for so long a period, being constantly impressed with the idea that I shall die early."

His aspiration was realised a few years afterwards, and in a larger measure than he had dared to dream of in his most hopeful moods. Meanwhile he had to proceed with the tasks of the day, and his thorough enjoyment of work enabled him to execute it with comparatively little fatigue. His brother had undertaken to prepare an address for the Royal Medical Society on the question proposed by the committee: "Does Phrenology afford a satisfactory explanation of the Moral and Intellectual Faculties of Man?" Friday, 21st November

1823, was fixed for the reading of the address and the debate upon the theories it advanced. The attendance of members and visitors was so large—over 300 persons—that it was found necessary to adjourn to the class-room of Dr Duncan, junior, in the College. The president of the evening read the essay, as Dr Combe was unable to do so himself, owing to weakness consequent on recent illness. A warm discussion followed, and George Combe, without preparation, spoke for two hours in defence of the system. At two o'clock in the morning the debate was adjourned until the Tuesday following, when it was resumed at seven o'clock in the evening and continued till nearly four o'clock in the morning. The members of the Medical Society were the chief opponents of the phrenological doctrine of the essay; the defence was made by the visitors. Combe thought that the opponents had "felt their own weakness so much on the first night that they had banded themselves together on the second, and displayed throughout a spirit of thoroughgoing partisanship that was far from philosophical." Some members of the Medical Society reported that the result of the two nights' discussion was the extinction of phrenology. Dr Poole requested each speaker to permit his speech to be published in the *Phrenological Journal*. The request was unanimously rejected. Dr Poole thereupon intimated that, in order to satisfy the public as to the real merits of the debate, he would publish a report of it from the shorthand notes taken on the occasion. The Medical Society appealed to the Court of Session to restrain the publication of the debate as threatened; the appeal was granted, but when the whole facts of the case were made known, phrenology gained in public estimation.

The Rev. Dr Welsh was at this time engaged in writing the life of Dr Thomas Brown. Combe took great interest in the progress of the work, equally on account of his friendship for Dr Welsh, and of his admiration for the subject of the biography. He regarded Dr Brown as the most eminent of

modern philosophers, and refers to him in one of his lectures "as the sun of metaphysics," whilst Reid was the moon. With Dugald Stewart he was not in sympathy, and found his philosophy unsatisfactory in many of its most important deductions. The explanation of this is simple: gauging everything by phrenological principles, he found Stewart's philosophy, for the most part, irreconcilable with them; but in Dr Brown's philosophy he recognised a general identity of principles, although stated under different terms. Hence, he rejected the former, and accepted the latter as the nearest approach to the true philosophy of the mind and morals. He was anxious that this identity, as far as it went, should be clearly expounded in the biography; and he urged upon Dr Welsh, in long arguments and illustrations, the necessity of adopting this view. Some of the ideas suggested by Combe had already occurred to the biographer, and this being mentioned, called forth a characteristic reply:—

"In regard to your former letter, I reckon it neither 'flattering' nor 'humbling' that you had come to the same conclusion, but a strong presumption that both of us have approached the truth. Iudeed it is one of the admirable qualities of phrenology, that its principles lead men to the same inferences, from the same phenomena, without any merit being due to either, as the conclusions are inevitable if we think on the subject at all. When you were last in town the leading idea of my letter about Brown's definition of a cause occurred at table, and I recollect of your making some remarks about it. I added it to my lectures under Individuality, so as not to lose it; and nothing is more natural than that your faculties and mine, applying the view then started to the doctrines in the *Instructor*,* should have come to the same results. Speaking of this subject, I may mention, *en passant*, that long before I became an author I used to pity the individuals of this tribe, in reading their lives, for their squabbles about the originality or priority of their ideas, descriptions, or discoveries. The world is interested in the truth; but it is a delusion of No. 10 (Self-Esteem) to believe

* A series of articles in the *Edinburgh Christian Instructor* on Dr Brown's philosophy.

that it cares much whether the first view was presented by A, B, or C. For my own part, therefore, were I capable of suggesting any ideas which posterity would care to preserve, the fact of doing so would be an ample reward, and although they were claimed by another, his title would never be disputed by me, provided he gave the world all the benefit of the discovery. There is no chance, however, of any such question arising, and this is a much greater misfortune than to make a discovery and to lose the praise of it."

Whatever differences of opinion there might be between Combe and Dr Welsh, their friendship remained always the same. In correspondence or in conversation they discussed each others views with philosophical frankness and calmness. Whenever Dr Welsh visited Edinburgh he resided with Combe, and thus they had frequent opportunities of discussing at length the questions which arose between them. The influence of phrenology was manifest in Dr Welsh's biography of Dr Brown ; yet the book was admired for its analytical spirit, and for the extensive metaphysical reading which it indicated. Sir J. Mackintosh thought it a work "of such merit that I could wish to have found in it no phrenology." On the other hand, the phrenologists regarded the success of this work as an acknowledgment of the claims of their philosophy to serious attention.

In 1824, although he was only thirty-six, Combe's hair was white, and this, combined with the grave expression of his countenance and his serious manner, made him appear a much older man than he was in years. As his circumstances became easier, and his position assured, the intensity of his character became softened by broader views of life and society. He had walked by strict rule, and had been almost like one who felt that he had no time to laugh. Now, there was a gentler tone in his letters, and a freer expression of his affection or esteem than before ; although he never overcame a certain old-fashioned formality, in addressing even his nearest relatives. This was not a change, but a development

of his character. His attachments had been always warm and faithful, but the expression of them had been restrained; improved health and improved fortune gradually removed the restraint. In this, as in other respects, he broke through the trammels of his time, for the Scotch character of his generation was in exterior cold and severe in its tenderest relationships. He owned that his self-esteem was large; but he was really modest wherever his claims to respect were acknowledged; it was only when he felt the absence of respect that the faculty asserted itself. He says of self-esteem: "I am conscious that 10 in me really serves a moral purpose. Some author, Hume, I think, says, or some one says it of him, that he did not impose on his friends the necessity of apologising for his conduct after his death. I have often felt that I should like to have the same said of me, and this I impute to 10. The same feeling would keep me from doing disgraceful things." It should be added that the faculty never caused him to take a view of his own place and power that his life and work did not justify. Dr Welsh contributed an article to the *Christian Instructor*, in which Combe was mentioned in eulogistic terms. Writing to his friend on the subject, Combe says:—

"Your estimate of me is probably too high; I say probably, for I do not reckon myself a judge. The place that I have set down for myself in the future history of the science is that which is occupied by Bernouilli and some others in the history of Newton's discoveries. Posterity will read Gall's works, Spurzheim's, and our present writings, and I fear that in mine they will find too few new ideas or substantial additions to the science to place me higher than the rank of an advocate for the truth. At present I am apt to be over-rated, which I do not desire, because the reading public does not know what Spurzheim, and especially Gall, have done. Your note, however, is advantageous to me in the meantime, and it has attracted some notice. The very idea of any man reaching posterity through phrenology, except in the character of a fool, is a striking novelty to many."

The experience gained from his courses of lectures in

Edinburgh, had determined Combe to accede to the repeated solicitations of Dr Elliotson and others to lecture in London. He proposed to deliver a course in the spring of 1824; but when he found that a member of the Phrenological Society, Dr Willis, who was then resident in London, had also resolved to deliver a series of lectures on phrenology at the same time, Combe withdrew his proposal. He considered that the degree of interest felt in the science in the metropolis was not yet sufficient to warrant the simultaneous appearance of two lecturers, and he therefore gave up the project for the present, much to the regret of the gentlemen who had suggested it. He also declined an invitation to lecture in Bath this season. His winter course at home proceeded satisfactorily; he wrote several new lectures; wrote a good deal for the *Journal*, and revised the proofs of the greater part of each number. He found that it would be at least a year before he could publish the second edition of his "Essays," in which he intended to present a complete system of phrenology; but in order to keep the public supplied with a convenient summary of the science, he prepared his "Elements of Phrenology." This little work was published in June 1824, and, after passing through many editions, it remains the most valuable manual of the system issued in this country.

At the end of April he was called to London by professional duties; and it happened that he had a week of enforced leisure, waiting for an interview with the Chancellor of the Exchequer. He occupied his time in investigating the position of phrenology in the metropolis, and he found it to be in a lamentable state indeed. The lectures of Dr Willis had proved a failure, having been attended only by seven hearers. The London Phrenological Society, which had been in existence about a year, had split into two parties, Dr Elliotson having retired with the principal members and formed another society. None knew how to take developments properly; and several men, who were ignorant of the first principles of the

science, were professing to draw characters; thus bringing ridicule upon the system by their ignorance and pretensions. The general public "did not care a fig for phrenology;" few knew of any authoritative works on the subject; and as for Combe, "instead of being like other prophets who have no honour in their own country, I have none out of mine."

This state of matters surprised, but did not dismay Combe: "If I live for ten years and return to London, it will be different," he wrote to his brother. One of the most disagreeable discoveries which was forced upon him was that of the evident dissension between the few professing phrenologists. They seemed to regard each other with suspicion, and would not interchange an idea lest some advantage should be lost by the individual who communicated it. This was ignorant selfishness struggling to gain a personal advantage out of the system, and, to Combe, the most repugnant element which it was possible to intrude in the propagation of any cause. He set to work vigorously to place the study of the science on a proper footing, so far as it was possible, in the few days at his disposal. He gave his support to the new society founded by Dr Elliotson, that gentleman being the only one in London who seemed to have any real knowledge of the system as a science. To Dr Elliotson and several of his friends he gave instructions for taking developments; he delivered two lectures to the society, and had an audience of thirty-six; amongst them, the editor of the *Lancet*, Mr Wakely, who expressed his determination to support the science. He met Captain George Lyon, who was about to accompany Parry on his new expedition, and succeeded in impressing him with the importance of making observations of skulls in his travels. He studied the pictures in Hampton Court; and he made a note of the developments as shown in the busts in Westminster Abbey of Milton, Ben Jonson, Shakespeare, Dryden, Addison, and others, for the purpose of comparing them with the faculties revealed in their works. He learned much and

he taught much, and the result is summed up in these words to his brother:—

“I am now more than ever impressed with the idea of the good I could have done by a month’s residence devoted to the science. They are rapidly waking here, and my only fear is that the period of cultivation may prove too limited to insure an ample harvest.”

On the 8th May he wrote again to the doctor:—

“Yesterday at my fourth call I found Mr Black, editor of the *Morning Chronicle*, and for one hour explained the principles to him—which he admitted—and illustrated them by reference to national development—English, French, Italian, Hindoo. Then a young man came in, apparently a reporter, and Mr Black said: ‘Let me try your science; examine this head.’ I did so, and dictated a sketch. Black could not sit still with emotion at the truth; and some hits, he said, were half miraculous. He then said: ‘Try my head.’ I did so; and when I began to dictate his character, his wife, who had heard the other, left the room; for, she said, she could not sit to hear her husband so dissected. I was equally successful with him. We spent another hour. He has a large head; glorious 30 (Comparison), 31 (Causality), and large sentiments; fair 17 (Conscientiousness), and moderate 14 (Veneration). He expressed the greatest regret that he had not seen me sooner, and asked me to dine with him to-day; which was impossible. In short, an impression is made which, although amidst his horrid life of slavery it can lead to nothing active, will secure us against all abuse in the *Chronicle*.

In addition to the strenuous efforts he made during his brief sojourn in London, to improve the position of phrenology there, he urged Dr Spurzheim to come to the rescue so earnestly, that the latter at length promised to deliver a course of lectures in the metropolis in March 1825. Combe returned to Edinburgh, and endeavoured by correspondence to keep his London disciples active in the cause.

In August he made an excursion to Ireland, and his observations on the country and the people afford a good illustration of his method of applying the principles of phrenology

to the study of national character. His attention was first attracted by the poverty of the peasantry; the miseries attendant upon the effort to eke out the existence of a family on the produce of an acre or two acres of land; the excessive population; and the prevalence of agrarian crimes. He then directed his attention to the phrenological developments of the people; and the following is an extract from "Cursory Remarks on Ireland," published in the sixth number of the *Journal*, in which he concentrates the salient points of his observations, addressed to several friends:—

"In travelling westward, the genuine Irish head appears in Kildare, and prevails in the other parts of Leinster and Munster. It is long, and narrow in proportion to the length. It extends far behind the ear, indicating great Combativeness and Philoprogenitiveness. The knowing organs, or superciliary ridge, are large, marking acuteness in direct perception; the forehead slopes rapidly, and the organs of reflection are small. Benevolence is not deficient; Veneration is disproportionately large; Firmness and Conscientiousness, especially the latter, are very generally deficient. Cautiousness is not large, and Secretiveness, although frequently, is not universally predominant. Destructiveness is not so large as Combativeness. Language is much larger than in Scotland. The head is of a fair size. The natural language of this combination of faculties expressed in the countenance and gestures is disagreeable. The look is coarse and unintellectual; the gait rolling and inelegant. In the neighbourhood of Limerick, and in that town itself, a different race appears, mixed with the aborigines. Their heads are large and broad; Cautiousness, Ideality, Love of Approbation, Firmness, and the reflecting organs are amply developed; the clear, intelligent look; the upright and graceful walk, with that impressiveness of manner which accompanies mind, are all distinguishable. In some individuals of this race, Ideality and Love of Approbation are so predominant as to produce that illumination of countenance which gives brilliancy to beauty. A colony from Spain is said to have settled in the west of Ireland, and the Spanish head and features are still found in Galway; Limerick also clearly bears the traces of an imported colony. In the town of Cork the heads of the lower orders are pure Irish, but those of the better rank are mixed.

“The natural character of the Irish corresponds exactly with the development here described. They are quick in perception and rapid in action; but their views are superficial, and their activity the result of unguided impulse. They are generous, or devoted, or fierce as particular feelings predominate for the time; but there is no justice in their generosity, no reflection in their devotion, and no dignity in their anger. They feel their wrongs, but they have not scope of intellect enough to see either their origin or their remedy; they suffer till their patience is exhausted, and then seek solace in revenge. Their eloquence (for the native Irish are orators) we attribute to their great organs of language, joined to the vivacity of their propensities and sentiments undamped by cautiousness and unrestrained by reflection. Their bulls we conceive to arise, not from great wit (for this is not a predominant organ in the Irish head), but from fluency of words with a confusion of ideas; and we believe the makers of the best bulls are the last to discover them. This development corresponds with the fact that the Irish make excellent soldiers, where all is regulated and mechanical movement; but indifferent sailors, where each individual is called on occasionally to act from reflection. It also explains the prevalence of the Roman Catholic religion in its most exceptionable form. The high reflecting powers and vigorous moral sentiments of the English Catholic, modify the spirit of his religion, and render him a reasonable man and a good citizen. The great Veneration of the Irish peasant leads him to worship the Pope and the priests, just as the same faculty, undirected by reason or revelation, prompted the Egyptian to worship the crocodiles. The deficient reflecting organs of the Irish, and the absence of philosophical education, and of the Bible in their vernacular tongue, throw obstacles in the way of their bringing the doctrines of their church to the test either of reason or of scripture. Their small conscientiousness gives a feeble check to lying and deceit, which, by polluting the fountain of evidence, render law impotent, and the attainment of justice nearly impracticable. All the faculties possess natural activity; and if we reflect on the Irish combination of organs operating under the oppression of poverty, in a state of idleness and without instruction, outrage, massacre, and conflagration will appear as the natural fruits of their mental constitutions placed in their external condition.”

One of Combe's suggestions for the remedy of Irish discon-

tent has been carried into effect, in the disestablishment of the Irish Church, nearly half a century after he made it.

“The peasantry must be relieved from the burden of two churches. It is inconceivable how few in number and diminutive in size are the Protestant places of worship in the middle and southern counties of Ireland, while the sums received by the Protestant clergy are enormously large. All outrages upon the moral sentiments and intellects of the people which rouse Combativeness and Destructiveness, and foster the spirit of revenge, must be put an end to, before the reign of reflection and right feeling on the part of the Irish can begin, and after it has commenced, the authority of the law must be maintained with a vigorous arm, and education sedulously encouraged. By such a course of proceeding the animal propensities may in time be subjected to control. At present the native Irish resemble children spoiled by ill-treatment and irritated by injudicious chastisements inflicted to reclaim them. They are too strong and too stubborn to be corrected by the lash; their sentiments must be soothed and directed to proper objects, and their understandings enlightened, if success is hoped for in calling them to virtue.”

The best testimony to the truth of his observations and reflections is afforded by the history of Ireland during the last fifty years.

On his return from London, he had, in addition to his ordinary course, delivered a popular course of lectures to which ladies were invited. The result was so satisfactory that he repeated the experiment in the winter, and with equal success. In October he made his first appearance in Glasgow as a lecturer, in response to an invitation signed by influential citizens. Curiosity more than scientific ardour attracted a large audience, but he told his friends that if only three out of the class became phrenologists he would be satisfied. He had the gratification of learning that amongst others who declared in favour of the science, were two private lecturers on anatomy, who soon began to teach its principles to their pupils.

His undaunted perseverance in advocating phrenology had already earned for him the admiration not only of those who

believed in the science, but also of many who either doubted its truth or repudiated it altogether. A tangible expression was given to this feeling by the Phrenological Society on the 22d December 1824. Combe was invited to dinner in Oman's Hotel, and there Mr James Simpson, as chairman, presented to him a massive silver goblet bearing this inscription: "From the Phrenological Society to George Combe, Esquire, its founder, as a mark of respect and gratitude." In acknowledging the compliment paid to him, Combe mentioned two facts of interest to the society, namely, that the first suggestion of the institution proceeded from the Rev. David Welsh, and that it was Mr James Brownlee (then present) who had first introduced Combe to Spurzheim.

CHAPTER IX.

1825-1827.—POSITION OF PHRENOLOGY—COMBE'S MANNER IN DEBATE
—BROUGHAM AS AN ORATOR—TOLERATION—A FRAUDULENT CLERK—
ESSAY ON "HUMAN RESPONSIBILITY"—PROBLEMS IN RELIGION—
REVELATION, THE MIND AND THE PHYSICAL WORLD—ABUSES OF
RELIGION—"THE CONSTITUTION OF MAN"—JEFFREY'S ATTACK—
CONTROVERSY WITH SIR WILLIAM HAMILTON—THE FRONTAL SINUS—
CORRESPONDENCE—PRACTICAL SERMONS—ABRAM COMBE—ORBISTON
—COMMUNITIES AND CO-OPERATION.

THE lectures delivered in the Edinburgh hall during the winter of 1824-25 proved the most successful course Combe had yet delivered. He began a popular course in March, which was attended by about 130 hearers, more than half the number being ladies, and representing all classes of society. Dr Spurzheim at the same date was attracting attention to the science in London; phrenological societies were being established in the most important towns throughout the kingdom, and in the United States; Combe was elected an honorary member of all the new societies, and his counsel solicited in the direction of their proceedings. At Copenhagen the system was warmly espoused by two prominent physicians, Dr Otto and Dr Hoppe; and Dr G. M. Paterson, who presented the Hindoo skulls to the Edinburgh Society, had returned to India with the determination to make known the science there. Phrenology now numbered amongst its adherents several men of eminence in science and philosophy, and its future promised to realise the expectations of its founders. Combe had every reason to be pleased by the results of his labours so far; but there were drawbacks. He had to pay the

penalty of the distinction he had attained. Although his exertions in the cause of the new science were gratefully acknowledged by the majority of those with whom he came in contact, his path was by no means free from thorns. By his position he was frequently brought into contest with men whom he respected; and still more frequently he was the subject of misapprehensions which demanded much time and thought to set right. It is remarkable, and admirable, as a product of his faith in phrenology, that in these contests he never consciously allowed personal feeling to interfere with his argument. When assailed with personalities he replied simply to the point at issue between himself and his opponent, stating the case and his answer with calm precision, and regarding the rest as additional proof that a man must speak and act in accordance with the predominant faculties bestowed on him. He preserved much of the same precision in conversation, but there was animation in his manner. Two gentlemen, who feared that their warmth in a debate had offended him, apologised, and he expressed surprise, being unaware of any offence, and owning that for his own part, in the earnestness of argument, he caused unpleasant feelings in others when nothing was farther from his thoughts than to give annoyance.

He had prepared a second edition of the "Elements" for the press by April, and he was making progress with the "System." He was busy, too, in observing public events, and turning them to account in their relation to phrenology. Writing to the Rev. Dr Welsh, 6th April 1825, he describes Brougham at the banquet which was given to him by his Edinburgh admirers.

"Last night I was at Brougham's dinner, and it was an awful failure. Cockburn's opening speech was sensible, but he preached it. (His 14, Veneration, is large, and he never can be grave without preaching.) He touched on the Queen's trial. Brougham began his reply like a maniac. He at once took up the Queen's trial and gave himself up to the unbridled fury of 5 (Combativeness) and 6 (Destructiveness).

‘ It was no trial ; it was a solemn combination of oppressors for the destruction of a victim,’ &c., as you will see in the newspapers. His eyes glared and his voice roared and grated. His countenance was dark and dreadful, as if the great fiend had animated it ; and he rolled on period after period in this overwhelming condition, while the 800 auditors sat in mute and breathless astonishment. This storm over, he then said that a great meeting like this should not be spent in uttering compliment and common place, but in declaring great principles and in infusing valuable ideas ; and he went over free trade, the Holy Allies, the High School of Edinburgh, and all in a very manly and admirable style. His eloquence is perfectly in unison with his head ; and his secret is just to let himself out, fearlessly and fully. His 18 (Firmness) and 10 (Self-Esteem) are large, and his rank and parliamentary privilege put him above fear ; and on the Allies he let out 5 (Combativeness) and 6 (Destructiveness) in a torrent of unmitigated invective, accompanied by the tremendous voice, fierce gesticulation, and looks which characterise these faculties. When he spoke of schools and teaching he allowed benevolence to play in equally unrestrained fervour ; his tones became soft and his features bright and benignant. There was no ideality in his eloquence, and very little of comparison ; but propensity and sentiment, vehement, powerful, and overwhelming, with a strong substratum of definite ideas in fact and principle, supplied by 19 (Individuality) and 31 (Causality). His head is decidedly above an average in size, and very high. The speeches of our home-bred orators, with the exception of Cockburn, were miserably bad.”

The lesson of toleration which Combe learned from phrenology, and which he endeavoured to teach, he carried into practice. On one occasion this philosophy was severely tried. A clerk who had been in his employment for several years, and on whom he had conferred many favours, had in the course of those years robbed him to the amount of £500. The man had talents, was professedly religious, was regular in his attendance at church, and, morning and evening, his neighbours were made aware of his private devotions by the sound of his voice in psalm singing and prayer. Combe had seen that the man was deficient in conscientiousness, according to phrenology, but trusted to his religion to keep him straight. On discovering

the fraud, Combe was at first confused by its extent, for the loss was a considerable one to him, but he did not use a harsh word to the man; he pointed out the benefits which had been heaped on him, and contrasted them with his conduct. Then he told him that in future there would be no safety for him except in situations where fraud would be impossible, and forgave him. Explaining the circumstances to Dr Welsh, Combe wrote—

“Do not suppose that I blame religion; all I mean is, and I am sure you coincide in it, that religion although sincere (and I have no doubt that ——’s was sincere) is not sufficient to supply the natural defect of conscientiousness. In future I shall never rely on piety as a substitute for that organ, and think myself to blame for not having acted more boldly on my own principles long ago. It is no new discovery that the organ is deficient in ——’s head. We had remarked this five years ago. If the criminal law were *corrective* instead of purely punitive, I would not hesitate a moment about giving him up to it. But he has a family, and they would be ruined on the present system.”

The above incident affords a good example of the practical effect which George Combe gave to his convictions; he suffered serious loss through long-continued and deliberate fraud, and yet sought only to direct the defrauder into the path which would be safest for himself and most beneficial to his family. Combe was earnest in everything; most earnest in his pursuit of truth, and he never faltered in the course which seemed to lead to it, however difficult the way or however much contumely he might have to endure in following it. In this year (1825) he was tending towards his most hazardous speculations, which finally found expression in the “*Constitution of Man.*” The religious doubts which had germinated in his mind as a child began to take definite form, and, through phrenology, to lead to definite conclusions. The problem which he desired to solve was the reconciliation of Divine grace with the condition of man. This was a bolder step than his adoption of phrenology; for much that is in 1876 regarded

as perfectly orthodox was regarded in 1825 as wildly heterodox. The attempt of the French revolutionists to overturn Christianity was still comparatively fresh in the memory of the people, and although they might tolerate any departure from established rule in science, they would not allow similar dealings with religion.

Combe's first public declaration of his theories as to the constitution of man were contained in his essay on "Human Responsibility as affected by Phrenology," read to the Phrenological Society on 2d February 1826. It was received with so much interest that the author was requested to print it, and the consideration of its principles was adjourned till the next meeting, on the 16th of the same month. There were doubts as to the principles suggested in the essay, and some alarm was created; but the majority of the Society acquiesced in the views propounded, or were silent. When, however, twelve months afterwards the principles were expounded and developed in the first essays on the Constitution of Man, bewilderment, horror, and indignation took possession of many of his best friends. Earnest appeals were addressed to him personally and by letter to suppress the whole series as subversive of Christianity and false to phrenology. He was accused of infidelity, and implored to give up his mad speculations for his own sake and for the sake of his friends.

The following extracts from letters addressed to the Rev. Dr Welsh will indicate the steps by which Combe advanced to the position so strenuously assailed, and will also show how wrongly the epithet "infidel" was applied to him:—

"12th June 1825.—Although you may have set me down as a man not under the influence of religion, yet in point of fact causality and veneration are almost in habitual co-operation in my mind; and I act and feel habitually as a part of the system of creation, and have great delight in tracing the Divine wisdom through all His works. I am never unhappy but I look out for a deviation from duty, and feel the most undoubted faith that when I observe my error and abandon the fault, peace and joy will return."

"26th June.—You say that if we believe that the mind is material and that it will perish with the body, the faculties will act in a different way from what they would do if we believed in immortality. This proposition requires some investigation. The doctrines of Revelation either are or are not in harmony with the mental constitution of man and the laws of the physical world. If they are not, then they can never prevail nor lead to good; but it is altogether irrational to imagine that God would reveal doctrines at variance with his own works, and therefore I at once dismiss this supposition as equally unphilosophical and irreligious. If, however, the three systems *are* in harmony, then it cannot be advantageous to act in one way if there is no immortality and in a different way if there is. For example, although I were to perish at death, it could never be my interest here to disobey any of the dictates of the higher sentiments and intellect. If I am to live to eternity, this is an additional motive to act in conformity to these laws; but in no respect would conduct be wise and beneficial under the one system which would not be the same under the other. It has often struck me that divines err in representing a religious life as at variance with that which would be dictated by philosophy. If the three systems harmonize, every action which sound philosophy would dictate must be acknowledged by religion, and *vice versa*; and hence our immortal life must be founded and begun in this. . . . The existence and attributes of God are so clearly revealed by Creation as well as by Revelation, and the organs of Ideality, Hope, Wonder, Conscientiousness, and Veneration are so related to these attributes, that I would regard the works of the Supreme Being, and religion both in practice and spirit, as rational and delightful although there were no hereafter, while they become so in a higher degree if our hopes reach to endless existence and closer communion with the Creator. Try, then, to point out one action which you could beneficially perform if this life ended all that would not be wise if there is an hereafter. At present I cannot see one.

"The belief in immortality, combined with the notion that this world is all ajar, has a bad effect on ignorant minds. They attribute evils which result from their own gross errors in conduct to the system of things, and fly to dreams of future happiness as the compensation for their miseries instead of proceeding to obey the dictates of nature and remove them. This is an abuse of religious belief, but it is not uncommon, and the people require to be admonished against it. Another abuse of religion is trusting to the efficacy of prayer instead

of adding obedience to the laws of the moral and physical world to pious supplication. A person whom I know married a woman with a bad brain: his sons turned out cockfighters, boxers, and gamblers. They picked their father's pocket, and cheated him by stealing his goods and selling them again to him. He is very ignorant; a Seceder, and very pious. He said. 'I thrash my sons and pray for them, and if it please God, after that to make them vessels of wrath, His will be done.' This, too, is a gross abuse, but the spirit of it is common."

11th August.—I am decidedly a friend to religion, and think it both philosophical and useful, and, besides, a source of high enjoyment. Our Scottish Church is the *best* in its forms and principles with which I am acquainted; and I, therefore, hold it no dereliction of principle to join in its worship, although I dissent from some of its views, and these of considerable importance, until a better is to be found. At the same time I have too much respect for the Church and for right principle to join in the communion."

The principles indicated in the foregoing extracts were based upon the theory that "God intended the moral sentiments and intellect to rule the actions of man, and constructed the human mind and physical nature with a determinate relation to these faculties, so that conduct in conformity to their dictates should be followed by happiness, and conduct in opposition to them should produce misery; just because, in the first instance, man would act in harmony with the scheme of creation; and in the second, in opposition to it." Out of this theory the essay on Responsibility was developed. He considered it an effusion rather than a scientific paper. Writing and reading it afforded him the greatest delight he had ever experienced in this world. Regarding it he writes to the Rev. Dr Welsh, 11th February 1826—

"Right or wrong, it was the spirit of inspiration that produced it, for it poured forth in torrents from the pen at the rate of 4½ pages of my close MS. per hour, without premeditation, and without requiring almost a word of alteration in the style. I tell you all this not to gratify my own Self-esteem and Love of Approbation, but your Individuality and Causality I see an immense field of practical application of the principles

before me, and feel convinced that my philosophic labours, if life and health remain, are only beginning; and now all fear and doubt and hesitation are removed. I have got a hold of the principle of the Divine administration, and most holy, perfect and admirable it appears. Now I can say for the first time in my life that I love God with my whole heart and soul and mind; because now I see Him as an object altogether gratifying to Benevolence, Veneration, Hope, Ideality, Conscientiousness, Comparison, and Causality. I hope you do not fear for my sanity; no, the region of the higher sentiments is one in which the joy of existence is the highest, because it is the purest and the best. To you I write all this because you like to know the workings of the inner man, and have kindred feelings. The doctor and Miss Cox* are converts to the doctrine, and the practice of it sheds a sunshine over our existence."

But this essay, which afforded so much happiness to himself and to those immediately associated with him, caused much alarm in the breasts of several important members of the Phrenological Society. Prominent amongst those who condemned it was Mr William Scott, whom Combe regarded as amongst the foremost of the advocates of phrenology, and for whose opinions he entertained the profoundest respect. In answer to Mr Scott's appeal that the essay should be withdrawn from circulation, Combe said—"Most readily do I agree to withdraw my paper when you request me to do so. For six months then, or probably more, it shall not again raise its head. But unless I hear something more cogent against it than has yet been brought forward, I shall look to the day when I shall bring it out, expanded and applied, in my own name and at my own responsibility." There were several members of the Society who regarded the essay with favour and believed that it afforded strong testimony to the truth of Christianity. Amongst these were the Rev. Dr Gordon and other clergymen, who had read the essay and heard Mr Scott's lengthy answer to it and the debate which ensued.

* His niece, who was now his housekeeper, as his sister Jean, on account of her health, was unable to discharge the duties of that position.

He weighed, with much deliberation, the objections raised against the doctrine of human responsibility advanced in his essay; and his convictions remained unchanged. He considered that the fundamental principles of the doctrine were demonstrated by Jonathan Edwards and other eminent and orthodox philosophers and divines. The position he had assumed appeared to be unshaken. Accordingly, the first draft of his "Essay on the Constitution of Man and its Relations to External Objects," formed the substance of the concluding lectures of the course he delivered in the winter of 1826-1827. This essay created still greater excitement than the previous one, for in it the doctrine, which was so offensive to many thoughtful men, was elaborated into a system. On the one hand he was urged to publish the views as calculated to benefit society; on the other he was urged to suppress them as they were dangerous to the interests of society, to phrenology, and to his own reputation. He took a medium course. He printed a small number of copies for private circulation and distributed them amongst those friends whose opinions he valued. He solicited a free communication of their thoughts, and if they would show to him that the essay contained important errors, injurious to the public, he pledged himself at once to suppress it.*

He modestly disclaimed originality of conception in the essay, except in so far that it pointed out for the first time, in a systematic way, the relations between the natural laws and the constitution of man. He also stated that the first idea of the work had been suggested by the perusal, in 1824, of an

* The essay on Man, in its original form, consisted of an introduction stating the principles on which the argument was based, and six chapters, namely—1. Of the constitution of the lower animals, and its adaptation to external circumstances; 2. Of the constitution of man, and its relations to external objects; 3. To what extent are the miseries of mankind referable to infringements of the natural laws; 4. On the combined operation of the natural laws; 5. Influence of the natural laws on the happiness of individuals; and 6. On human responsibility. This last chapter was a slightly modified expression of the same views advanced in his first essay on Responsibility.

essay in manuscript by Spurzheim, afterwards published under the title of "A Sketch of the Natural Laws of Man." He had requested the friends to whom he presented copies of the essay to regard it at present as a strictly private communication, and that their remarks upon it should be addressed to himself, so that before he submitted it to public criticism he might be able to amend it by the new light which their arguments would afford him. He was, therefore, surprised when he discovered that Mr William Scott had printed a pamphlet of 81 pages, reviewing the essay, and distributed it amongst the members of the Phrenological Society. Combe answered the attack in another pamphlet, citing as authorities for his views of the natural laws, Dugald Stewart, Montesquieu, Blackstone, Paley, and others. This elicited a second pamphlet from Mr Scott, in which he maintained his position that Combe's principal views on the natural laws were "fundamentally erroneous, and contrary both to sound natural reason and to sound Scriptural doctrine." But he respected his opponent although he entirely disagreed with him, and in concluding his first pamphlet he said: "The very straightforwardness, good faith, and simplicity of his character have conspired to delude him, as he never seems to suspect that what appears clear to him, can ever be doubtful to any other person." The discussion ceased, and Combe proceeded to prepare the essay for publication; the principles remained unaltered, and his chief labour in revision lay in rendering some of the statements more explicit.

The second edition of the "System of Phrenology" was published at the beginning of October 1825. It now formed an octavo volume of 566 closely-printed pages. At first it appeared to attract little attention; few journals noticed it, and it sold slowly. But early in 1826 it was rumoured that Jeffrey was about to review the work himself in the *Edinburgh*, and this gave a new impetus to the local interest in the science. The article formed the first in the September number of the

Review. It was an elaborate exposition of the antagonistic views of phrenology, but paid considerable respect to Combe. The following sentences are from the opening paragraph of the review :—

“This is a long, sober, argumentative exposition of a very fantastical, and, in our humble judgment, most absurd hypothesis. The author, however, is undoubtedly a man of talent as well as industry; and while many of his remarks indicate no ordinary acuteness, it is impossible not to admire the dexterity with which he has occasionally evaded the weak, and improved the plausible parts of his argument, and the skill and perseverance he has employed in working up his scanty and intractable materials into a semblance of strength and consistency. Phrenology in his hands has assumed, for the first time, an aspect not absolutely ludicrous; and, by retrenching many of the ridiculous illustrations and inconsistent assumptions of its inventors, as well as by correcting its terminology and tempering its extravagance, he has so far succeeded in disguising, its inherent absurdity as to afford a decent apology for those who are determined, or at least very willing, to believe.”

The reviewer marvelled that such nonsense as that taught by phrenology could have survived the first exposure of its absurdity, and he was surprised that Edinburgh should be the nursing ground of “this brood of Germany.”

“The phenomenon, we think, can only be solved by the circumstance of a person of Mr Combe’s sense and energy having been led, by some extraordinary accident, first to conceive a partiality for it, and then induced, with the natural ambition of a man of talent, to make it a point of honour to justify his partiality.”

An early copy of the *Review* was obtained by Combe, and he immediately prepared an elaborate answer, which he wrote with so much rapidity that it was published in pamphlet form almost simultaneously with the number of the *Edinburgh* containing the attack. It was also printed in the *Phrenological Journal* (October 1826). He addressed the answer as a letter to Jeffrey personally, and the authorship of the article was not denied. In this answer Combe repudiated the compliment

that phrenology had in his hands “assumed, for the first time, an aspect not absolutely ludicrous;” this assertion, he said, “could be made only in utter ignorance of the writings of Drs Gall and Spurzheim.” In concluding the letter he briefly recapitulated the topics on which he touched, and it is quoted as an indication of the tenor of his argument.

“I have endeavoured to show that phrenology is more widely extended and deeply rooted in the public estimation than you appear to be aware of;—that your grand proposition of the internal mental faculties not acting by means of organs at all, is refuted by the known effects of opium and wine, and also discountenanced by the authority of your own review of Cullen, Gregory, and Magendie;—that your objections to the assignment of separate faculties to the mind, is obviated by Mr Welsh’s metaphysical answer, and absolutely refuted by the successive appearance of the mental powers in youth, by the phenomena of partial genius, of dreaming, somnambulism, idiocy, and monomania;—that in your denial of the phrenological faculties as primitive principles of mind, you stand opposed to Reid, Kames, Stewart, Brown, and the greatest metaphysicians of Britain, who admit of faculties similar to seven-tenths of them;—that in your attempts to resolve several of these faculties into one, as the love of young women, of children, &c., into benevolence, and hope and fear into mere negations of each other, you refute yourself;—that your objections to Concentrativeness, Individuality, Size and Weight are founded on erroneous representations of the phrenological statements and conclusions;—that on colouring, the phrenological theory is consistent in itself and with nature, while your *doctrine* in the *Encyclopædia*,* and *fact* in the *Review*, on this point are at variance with each other;—that your objection to *Size* in the organs as a measure of power in the case of the external senses, are refuted by the authority of Blumenbach, Scemmering, Monro, &c.; all of whom teach that this rule holds in regard to the nerves of the senses;—that Magendie teaches the same doctrine in regard to the brain and internal faculties;—that the reality of the distinction between *power* and *activity* as separate qualities of mind, which you deny, is supported by the opinion of Bonaparte, and proved, besides, by examples of characters on the stage;—that this distinction holds even in the case of colouring, as

* Article “Beauty” in the *Encyclopædia Britannica*, written by Jeffrey,

is established by the power displayed by Titian, Rubens, and Audubon on canvas, contrasted with the activity of an assorter of ribbons, or of a miss selecting threads for her sampler;—that your objections founded on the effects of education and disease in the mental faculties are rendered plausible solely by your omitting the qualification, constantly stated by the phrenologists, that size determines power *only when other things are equal*; and by misrepresenting their doctrine, which is this, that if the same education, or the same stimulus of disease is applied to two brains, one large and the other small, the effects produced will be great or small in the direct ratio of the size of the brain;—that modifications of character to some extent are perfectly in accordance with phrenological principles;—but that changes of talents and dispositions have their limits in nature, and in phrenology also;—that your objections to the phrenological organs, not being radically distinct in their appearances, are equally applicable to many of the nerves, and particularly to the nerves of motion and feeling, which are as little distinguishable from each other, in structure and appearance, as the organs in the brain, and yet are ascertained to perform separate functions;—that your contempt of the anatomical discoveries of Drs Gall and Spurzheim, is founded in ignorance and discountenanced by the greatest modern anatomists;—while your assignment of the merit of such part of them as you admit to be true, to Reil, is refuted by Reil himself;—that the treatment which phrenology has met with from you and other critical authorities, is accounted for by Professor Playfair when discussing the reception given to the discoveries of Newton;—that the phrenologists have offered you means of verifying or refuting their facts, not inconsistent with either your dignity or delicacy, but of which you have sedulously declined to avail yourself;—that most of the blunders imputed to the phrenologists are fictions of the opponents, while their real errors, although they may affect the reputation of individuals, constitute no valid objection against the science;—and, finally, that even in the indirect praise which you bestow on the ‘System of Phrenology,’ the same lack of knowledge and just discrimination, which characterise all the other parts of your criticism, are conspicuous.”

To this Jeffrey replied in a “Note to the Article on Phrenology” in the 89th number of the *Review* (December 1826). He thought the phrenologists had taken their physic,

on the whole, very quietly, the only considerable reclamation being Mr Combe's letter, and that was referred to because of two points it contained, the one directly impeaching the integrity or credit of an individual, and the other the truth or fairness of a particular statement in the *Review*. The two points were: First, in regard to the question of colour, the answer was that the reviewer in whose head the organ of colour was said to be depressed *could* distinguish and admire different colours; and that the article on "Beauty" in the *Encyclopædia* did not maintain that there was no beauty in colours or combinations of colours, but the very reverse. Second, in regard to the case of the Welshman who in consequence of an injury to the head lost the use of English, to which he had been so long accustomed that he had forgotten his native language, and recovered the use of Welsh, that the deduction of the reviewer that the organs of language must be subdivided if one part remembered English and the other Welsh words, was a legitimate and logical deduction from the principles of phrenology as stated by Mr Combe. The reviewer took leave of the phrenologists "in peace and in amity," with this compliment to Combe,—

"We consider Mr Combe as a very sensible and ingenious man, and acknowledge his pamphlet to be written, not only with much acuteness, but, with the two exceptions we have noticed, with great propriety and fairness."

In the succeeding number of the *Journal* (February 1827) Combe addressed a second letter to Jeffrey. He explained that the reason why the phrenologists had been so quiet after the publication of the tirade in the *Edinburgh* was that the objections raised had been so often raised and answered before that they were unworthy of further attention. Every man who had studied the science at all had already encountered the same objections and knew how superficial they were. He proceeded to deal with the two points to which the "Note" particularly referred. (1.) He argued that the organ of colour

when full, found delight in colours themselves ; when small, it found pleasure in colours only by association with other ideas : this was the case with Mr Jeffrey ; and it was quite consistent with the phrenological doctrine that he should be able to *perceive* differences of hues although the organ in him was depressed—"the act of perception being the lowest degree of activity of the faculty." (2.) He was perfectly satisfied with the admission in the "Note," that the passage regarding the Welshman was not intended to be given as his statement, but only as an "inference from" it. He had not attempted to explain *how* the man forgot English and recollected Welsh, and he quoted from the "System of Phrenology" to show that the advocates of the science attempted to observe "the laws which regulate the union of the mental and corporal parts of man, without pretending to discover the essence or the *modus operandi* of either." The case of the Welshman simply illustrated the fact that a certain portion of the brain which phrenologists believed to be the organ of language being affected by an accident, the faculty was affected.

There the discussion closed ; but a more serious one was impending, and this time the antagonist was Sir William Hamilton. In 1826 Sir William delivered an address in refutation of phrenology before the Royal Society of Edinburgh ; and in 1827 he delivered a second address on the subject before the same society. The rules of the Royal Society precluded any reply to the arguments he advanced ; and the phrenologists, therefore, called on him to publish the addresses in order that they might have a fair opportunity of testing his assertions and of answering them. This he did not do. In April 1827 it was advertised that Sir William would deliver a popular lecture against phrenology in a classroom of the university, for the benefit of the distressed operatives. Combe wrote to Sir William soliciting permission to make a reply at the conclusion of the lecture ; or, if that should not be agreeable, he asked his assistance in procuring

the use of a class-room in the university for a separate lecture to be delivered on another day—also for the benefit of the distressed operatives. Combe's object was to address as nearly as possible the same audience that was addressed by Sir William Hamilton, and to use in defence of phrenology the same crania which his opponent used in attacking it. Sir William expressed his readiness to agree to either of the requests; but the sanction of the *Senatus Academicus* had to be obtained, and when sought it was refused, on the ground that Mr Combe, not being a member of the *Senatus*, could not be permitted to lecture within the university. The *Senatus* also decided that it would be "wholly unacademical to permit him to make any observations in the class-room on Sir William Hamilton's paper."

By the request of the committee for the relief of the distressed operatives, Combe delivered a lecture on phrenology in the Assembly Rooms, George Street, which was attended by about six hundred people, and contributed a considerable sum to the Relief Fund. The lecture occupied nearly three hours; Professor Syme, who was not a phrenologist, had forwarded all the open skulls in his collection for the use of the lecturer, and these, with all the open skulls belonging to the Phrenological Society, were used to demonstrate the truth of the new science. Sir William Hamilton was present; the main points which he relied on in his objections were the existence of the frontal sinus from the age of three and the obstacles it offered to the possibility of the truth of the doctrine in regard to at least half a dozen of the organs mentioned and localised by the phrenologists. He asserted that he had proved this by fifty skulls in the University Museum, which had been selected from the Catacombs in Paris, labelled and numbered by Spurzheim himself. To this Spurzheim answered that the fifty skulls had been selected as examples of extreme developments of particular organs, many of them "monstrosities"—their history was unknown, the sex,

in some cases, doubtful, and they could not be regarded as average specimens of crania.* They were offered to Combe for use at this lecture, but he was only to be permitted to open three of them, and he declined the offer unless he might be allowed to open twelve at least. Referring to the lecture he says :—

“By using Mr Syme’s specimens the charge of selection was obviated ; and by producing all of them, no room was left for suspecting intentional omission of any ; while at the same time an opportunity was afforded of contrasting them with the phrenological collection, and of detecting any partiality in the latter, if it existed. The result I maintained was that, while organs were found to differ in size to the extent of an inch and upwards, the departures from parallelism in the tables of the skull did not in general exceed one-tenth or one-eighth of an inch ;—that in childhood the sinus did not exist ; that after puberty it was generally present to a limited extent, so as to throw a difficulty in the way of observing the development of the organs of Lower Individuality and Size ; and that in old age and disease (both of them states excluded from the sphere of phrenological observation), it was occasionally met with very large. I exhibited skulls of all ages, from birth to the decline of life, *sawed completely open*, and showed examples of the sinus in all the above stages ;—in one skull it was very large, but accompanied with striking and indisputable marks of disease ; in another also it was very extensive, but it had belonged to a soldier who had committed suicide from disease.”

After an exchange of numerous controversial letters the opponents agreed—on the proposal of Sir William Hamilton—to refer the questions of fact in their discussion to the decision of three gentlemen, who should be considered competent to act as judges in the matter. In agreeing to this arrangement Combe protested that it was an unphilosophical course to adopt. He acceded to the proposal of a reference, not because he approved of the fitness of such a proceeding, but because Sir William Hamilton had not afforded him a

* The above facts were mentioned in the first number of the “Phrenological Journal,” 1823, soon after the casts were received in Edinburgh.

more eligible mode of meeting his arguments. He had all along thought that the proper mode of conducting the controversy was for Sir William to publish his objections (which he had been repeatedly asked to do), and that the phrenologists should either admit their validity, or furnish an answer to them, constituting the public at large, and especially the medical profession, the umpires. Sir William stated that he did not propose "to submit questions of inference to the decision of arbiters, but questions of *sensible existence and non-existence—facts, not reasonings from facts.*" Further, he thought it—

"Better for the interests of truth that, in any public discussion, both should depart from an admitted basis of reality, instead of each making his own assertions and counter-assertions; and, with this view, I proposed that the real state of the facts should be determined by an impartial verdict *previously* to any public discussion as to their import."

Sir William Hamilton named Dr (now Sir Robert) Christison, Professor of Medical Jurisprudence, to act on his behalf; Combe desired Dr John Scott to act for him; and these two gentlemen nominated the late Professor Syme, Lecturer on Anatomy and Surgery, as the third arbiter. The first meeting of the arbiters was held in July, when an attempt was made to arrange the issues to be tried regarding the frontal sinuses. Sir William Hamilton had written out fourteen propositions of the phrenologists' and fourteen counter-propositions of his own; but the propositions which he attributed to the phrenologists were at once denied by them, as either so erroneously stated, or so entirely opposite to their real principles, that they formed no part of the system. He proceeded to prove his statements by the production of a set of the skulls from the University Natural History Museum—the same which had been offered to Combe for his lecture, and held to be good phrenological specimens because they had been selected by Spurzheim. Combe objected to them now as formerly, for the reasons

already stated, and the arbiters sustained his objection. Another meeting was held early in November, and, after discussing the best method of procuring accurate facts for deciding the points at issue between Sir William Hamilton and Combe, the arbiters decided that, instead of examining skulls, the history of which was unknown, and which could not always be cut open to the requisite extent, they would attend the pathological dissections at the Infirmary and Fever Hospital; and by this means they hoped to procure, in a few months, a sufficient number of correct observations, with all necessary knowledge of collateral circumstances.

Sir William Hamilton had, in his correspondence, declared that it was the doctrine of Drs Gall and Spurzheim which he had determined to extinguish, and he would not regard the modifications made by their disciples as at all affecting his argument. Remembering this, Combe, on learning that Spurzheim would be in Edinburgh in January 1828, proposed that Spurzheim should take his place before the arbiters. But Sir William declined the proposal. He, however, addressed a long letter to the *Caledonian Mercury* contradicting statements which he understood had been made by Spurzheim in his first lecture, delivered in Edinburgh in January 1828, repeating the propositions he had previously advanced, and condemning phrenology on philosophical, physiological, and religious grounds. Spurzheim and Combe replied; the former challenged him to a public controversy; the second merely recounted the facts of the discussion from his side. Sir William accepted the challenge, but required Spurzheim to name competent umpires, and refused to have anything to do with Combe in the present dispute. Spurzheim asked Sir William to name the day on which he would meet him. The latter repeated his request that Spurzheim would name the umpires. A long and melancholy correspondence ensued, in which it must be said that Spurzheim and Combe maintained their temper, while Sir William Hamilton appears

to have lost his at several stages of the dispute. Spurzheim went to Glasgow, leaving an intimation that if Sir William would even yet fix on a day to discuss their differences publicly he would return, at whatever inconvenience to himself, and confront him. The arrangements for the delivery of his course of lectures in Glasgow had been made in January; he had given his opponent repeated warnings of the fact in urging him to a public discussion, so that his departure should have been attributed to the real circumstance that he had an engagement to fulfil; but some petty capital was temporarily made by his opponents, who accused him of fleeing from the field. This could scarcely be the case considering the proposal he made, and that he returned to Edinburgh immediately after concluding his lectures in Glasgow.

Meanwhile the discussion again devolved upon Combe, and the different humours of the disputants will be sufficiently understood by the perusal of their concluding letters. Sir William Hamilton charged Combe and the *Scotsman* with manifold misrepresentations; he also stated that the arrangements for Combe's lecture on behalf of the distressed operatives had been a "phrenological job;" that Combe had accused him of delivering a lecture for some personal profit; that in alluding to Combe's pamphlet (the "Essay on Man," then in private circulation, but not published) he wished to show the absurdity of the idea that by *reading* a paper against phrenology he had incurred an obligation to the phrenologists to publish his attack; that had he conceived it possible that his note could have excited prejudice against Combe's religious opinions he would not have written it; and he would withdraw it if Combe pleaded that it was personally injurious to him; but phrenology was, in his opinion, *implicit Atheism*. The main portions of the "Essay" had been publicly read to the Phrenological Society, and it was declared to be on the eve of general publication; he had therefore a right to canvass its arguments. "Did not the Christian Advocate of Cam-

bridge publish an elaborate refutation of the ‘*Œdipus Judaicus*,’ which was only privately circulated by its author? I have never read your work; and if you mean to assert that the doctrine it maintains is ‘diametrically opposite’ to the material necessity, or fatalism of human action, I am happy to afford you an opportunity of contradicting a current misconception.” But he could well imagine that Combe was anxious to avoid alarming the phrenological clergy who had some character to support as theologians, and who, as soon as they left the camp “(and decamp they must) would carry with them, as they brought over, all the women converts and half the men.” Combe, in objecting to Sir William Hamilton’s public comments upon an unpublished essay, had remarked that he might have as justifiably commented upon Sir William’s privately-expressed opinions regarding Spinoza and accused him of Atheism. Sir William replied that he had never believed in the opinions of Spinoza, and regarded Combe’s remark as an attempt at intimidation. He concluded by protesting against any credence being given to any assertions made regarding him by the phrenologists. He did this because the whole correspondence was intended for publication. The foregoing summary will explain the allusions in the following letters:—

George Combe to Sir William Hamilton, Bart.

EDINBURGH, 12th March 1828.

“MY DEAR SIR,—To a lover of peace like myself, it is gratifying to have it declared that you would do as a favour what could not be exacted as a right,—personally to oblige me,—because, were it not for your strong and repeated asseverations to this effect, I should certainly have inferred from the whole tone and complexion of your recent communications that your great aim was, not to discuss a philosophical question with philosophical temper, but, through misrepresentation, violated confidence, and an appeal to prejudice, to excite personal ill-will against one whom you had failed to touch by the weapons of reason. This conclusion would have been forced upon me even by your first attack upon a paper or essay of mine, no-

wise connected with our phrenological controversy ; and still more by your persisting in this course after being fully apprized of its having been a private communication made to persons in whom I had confidence, under an express engagement, *upon honour*, that it should not be publicly criticised in any way, and that my object was to obtain their friendly advice and opinion, before any position should be taken by me absolutely, even in my private thoughts, or in any shape before the public. To me, certainly, it did appear that, after being put in possession of those facts, your lips were as much sealed as those of the parties on whom my confidence was originally bestowed, and who, by retaining my communication, agreed to the conditions on which it was made. You justify your attack by reference to the answer to the ‘*Ædipus Judaicus* ;’ but you do not show that the ‘*Ædipus*,’ like my essay, contained no allusions to any existing system, and that it was privately circulated among the author’s friends with the sole view of obtaining their confidential criticisms on its merits prior to publication ; and although you had so shown, I would still reply, that the commission of one wrong by a Cambridge scholar does not justify another wrong even by a senior wrangler of that university.

“The error you have committed is greatly aggravated by the avowal that *you have never seen the essay* which you have ventured to characterise so offensively, and, although my practice hitherto has been to confine myself to a plain statement of facts, supported by documents, in answer to aspersions, I shall venture to assert here, that you are the first person who, in profound ignorance, in so far as personal knowledge is concerned, adventured on the faith of vague report to charge upon another Atheism, and everything else that could be supposed capable of appalling the sentiments and scaring the imaginations of the good and pious ; and all this, as you say, for the charitable purpose of affording me an opportunity of contradicting the rumour. I have told you also that I am about to publish the essay of itself ; and most men would have considered publication as a far better means of putting down gossip-misrepresentation than by simple denial, or by overthrowing a metaphysical superstructure which owes its existence entirely to your own imagination.

“You certainly display no less confidence in your metaphysical acumen than you did previously in your anti-phrenological polemics. In the latter, anticipating a triumph, you commenced by vaunting on your own side, and contemning the other, by expressions highly derogatory and insulting to

the intellect and character of Drs Gall and Spurzheim ; but neither in public, nor under our private reference, have you hitherto adduced an iota of evidence in support of your boasted objections. The very fact of the umpires having agreed, as is established by their report, to go in quest of evidence themselves on the subject of your allegations, proves that you neither adduced nor offered to adduce, any which they deemed satisfactory. You now talk with equal disrespect of the mental capacity in regard to metaphysics, not merely of your humble correspondent, but of such of the Calvinistic clergy of Scotland as have embraced phrenology, and of the sex whom you derogatively call "women," but who, in my opinion, have generally fully as much of intellect, and a great deal more consistency in ratiocination than their contemptuous critic. My allusion to Spinoza was not introduced with the view of intimidation. Its sole purpose was, by establishing a parallel case, argumentatively to put you out of conceit with your mode of attacking me. Even this, however, has failed to produce the desired effect. I leave it to the public to decide on the motives of your conduct in this respect and of mine ; and only add that I distinctly disavow every imputation on your religious opinions, whether stated privately or in public.

"It does appear to me that one not of the least of the errors into which you have fallen is fancying that the phrenologists are writhing under the lash of your pen. For myself, I can say most truly that I have suffered nothing, and experienced no uneasiness whatsoever, except from the time wasted in replying to a correspondence filled, as it has always seemed to me, with perplexed ideas and entangled expressions, and in which my opponent has been constantly shifting his ground. An intoxicated person thinks every one else tipsy, and that the whole external world is turning round. I account for your rodomontade and for all your abuse, by supposing that, being angry yourself, you take it for granted that all the phrenologists are impassioned. Being averse to quarrelling, I took no notice of your expressions as they occurred ; but, before closing the correspondence, I must distinctly state that I consider you to have indulged in assumptions and insinuations against the phrenologists and me, of the most unhandsome, ungenerous, and unwarranted description. In my own letters I have watchfully endeavoured to avoid being drawn into the imitation of such conduct. If, notwithstanding all my efforts to the contrary, I have in any instance misrepresented a fact or statement, or indulged in any personality whatever, which up to this moment I am unconscious of having done, I shall

be most truly sorry for it ; nothing was farther from my intentions, and nothing could so effectually injure my cause.

"I must also protest against your either making me responsible for what has been done by others, or of turning your correspondence with me into a vehicle of attack upon third parties. I have told you before, and now repeat, that with the articles in the *Scotsman* I had no concern directly or indirectly. That journal is quite able to answer for itself ; but I may remark that what has appeared in it can hardly be called anonymous, the author being known to every one, I should think, but yourself. He has, I know, avowed the authorship to some of your own friends ; and I have heard him say that, out of kindness to you, he gave his review of the controversy a title which he is not accustomed to use, and abstained from pointing out a variety of inconsistencies into which you had fallen. His review was also, in my opinion, remarkable for its impartiality and dispassionateness ; but had it been otherwise, the answer should have been sufficient, that I have not written a syllable against you to which I have not affixed my name. As to personalities, those who ought to be impartial judges have assured me they consider you as the party who alone has unwarrantably indulged in them, and that the language you have employed, when speaking of phrenology, its founders and advocates, has been exceedingly discourteous and unhandsome. But of all this the public will judge.

"Your remarks regarding the placarding and advertising of the lectures are unworthy of yourself. The committee of inhabitants for relief of the distressed operatives did what they saw proper, and announced the proceeds at what they saw just, without the slightest interference on my part. I had no responsibility and feel no anxiety on the subject.

"In one thing only I must in conclusion acknowledge you have succeeded ; that is, in drawing me into a correspondence on various subjects utterly unconnected with *your chosen task of disproving phrenology* in a scientific manner, by adducing physiological evidence against it. But for the future, if we correspond at all, our communications must be confined strictly to *your proofs* ; for I am fully determined against travelling with you in this form and manner, over the boundless field of ethics and metaphysics. On such subjects there is no other way of understanding each other or making ourselves understood by the public, than by delivering ourselves in the shape of a volume, or rather of volumes."

Sir William Hamilton, Bart., to George Combe.

“MY DEAR SIR,—As you still obstinately persevere in your untenable assertion that I had no right to refer to your *book*, let us throw the book out of the question; and I beg you to answer me this interrogation: *Why are you better entitled to allude to opinions advanced by me, in a paper read before the Royal Society, than I am (AND IN REPLY ONLY TO YOUR OWN ALLUSION*) to refer to opinions maintained by you, in a paper read before the Phrenological Society, and which was even reported and published in the phrenological newspaper, the ‘Scotsman’?* Independently of all right, I have, however, already expressed my willingness to withdraw the obnoxious note if it can be shown that its purport could be, to you, of any personal disadvantage, and I further offer to do so if you state, either that the opinions in your printed work are not the same with those in your paper, or that you have subsequently changed your views, or that you have no intention of again publishing them to the world.

“In regard to ‘the mental capacity of such of the Calvinistic clergy as have embraced phrenology,’ on that point at least, you and I are pretty nearly at one. Those of them who *do not* hold the physical necessity of human action, are, by you and me, and all who know aught about the matter, despised as purblind phrenologists. Those of them who *do*, are by every one, not the veriest tyro in theology, viewed as the most ignorant, or the most heretical of divines. They can only escape the phrenological to be impaled on the theological horn of the dilemma. I, indeed, condemn no Calvinist for phrenological opinions; *as, in fact, no true phrenologist can be a Calvinist.* ‘*The contingency of second causes,*’ and ‘*the liberty of man undetermined by any absolute necessity of nature,*’ is a dogma, as much part and parcel of the Calvinistic scheme, and is as strongly enforced by the Confession of the Scottish Church,† as any of the Five Points; and a clergyman who could maintain an opposite opinion, would promulgate a heresy, not only condemned by the standards of Calvinistic orthodoxy, but in contradiction to all the doctrines hitherto received as fundamental by *every Christian sect.*

“It is also well in a phrenologist to insinuate against me

* Combe requested Sir William Hamilton to publish the paper in order that phrenologists might have an opportunity of replying to it.

† Note by Sir William Hamilton. See “Confession,” c. iii. § 1, c. iv. § 2, c. v. §§ 2 and 3; and above all, c. ix. §§ 1 and 2.

any disrespect of the Calvinistic clergy, and this when in the very act of guarding their system against unmerited reproach ! Calvinism, in its day, has been the object of no merciful abuse. But the reviling of its enemies has been light, when compared with the approbrium cast on it by the philosophy fondly embraced by some of its disciples, even as a new pillar of their faith. The treatment, indeed, of their clerico-Calvinistic converts by the phrenologists has been at once cruel, perfidious, and ungrateful. After seducing them from their walk of usefulness, after exposing them to ridicule for the credulous profession of an idle hypothesis, and after abusing their ghostly influence to decoy the multitude into the net, it was certainly too bad to hold up their victims to public and to bitter derision, by proclaiming *that a faith in the peculiar doctrines of Calvinism, was only to be explained by the inordinate development of the brute propensities of Self conceit and Murder.**

‘That was the most unkindly cut of all.’

“ I must also protest to the ladies against your groundless imputation of disrespect to the sex, in having spoken of them in their generic capacity, as *women*. I regard them, on the contrary, as gracing any opinion they may chose to patronise ; and of the phrenological, I am free to acknowledge, that they constitute not merely its only ornament, but its *principal strength*. I am, indeed, truly afflicted in being compelled to contradict a theory which they have taken under their especial protection ; but philosophy has no politeness. And if I should have offended their sense of logical independence, by insinuating that they have been brought blindly over to the new doctrine, by the influence of clerical example on their constitutional piety, I merely stated what the male phrenologists themselves not only publicly proclaim, but on which they even profess to found a debt of gratitude to the clergy of the Scottish Church.

“ I leave the assertions relative to your own misrepresentations, &c., to be estimated without any further comments.

* Sir William misapprehended the passage in Spurzheim’s work to which he alluded in the above sentence. “ Dr Price, universally known by his mathematical, moral, and political writings, was the son of a dissenting minister at Brigend, in Wales. His father was a rigid Calvinist, but young Richard occasionally started his doubts and difficulties (his Self-esteem and Destructiveness being SMALL), and often incurred his father’s displeasure by the arguments which he advanced against the tenets of his sect.”—Spurzheim’s “ Physiognomy,” 1826, p. 105.

In regard to the anonymous articles in the *Scotsman*, I am, to this moment, utterly ignorant of their author. I certainly never took the trouble of inquiring; and if I had wasted a thought upon the matter, I should have deemed it unjust to have attributed, on suspicion, to any respectable individual, such discreditable productions. But though, in themselves, beneath consideration, if your approbation extends so far as to print them in the *Phrenological Journal*, I may be disposed to deal with them as representing the school; and shall be happy, in that case, if you will permit me to illustrate their merits by a commentary.

"I am glad to hear that you mean hereafter 'to confine yourself strictly to the proofs.' *This is precisely the lesson I have been desirous of teaching*; and in following you, for a moment, in your irrelevant excursions, I only intended, by retorting your own warfare on yourself, to put you out of conceit with a favourite mode of disputation, and to compel you, *even for your own sake*, to limit the controversy to the facts. I allow many statements of yours to pass without observation; because, though easily refuted, their importance would not compensate the trouble.—I remain, &c.,

" W. HAMILTON.

" 16 GREAT KING STREET, 14th March 1828."

In reading the last paragraph of Sir William Hamilton's letter the reader should refer to Combe's letter, and compare the manner and tone of each disputant. Sir William frequently emphasised his remarks by underlining them; and the allegation thus emphasised, that Combe led the way into personalities, is erroneous. The entire correspondence was published in the fourth and fifth volumes of the *Phrenological Journal*, and occupies about a hundred closely-printed pages. The questions at issue remained undetermined; the phrenologists and their opponents equally claimed the victory. Sir William made many assertions; Combe asked him to prove them before the umpires as he had proposed to do; but at the same time he stated that their brains were cast in such different moulds that he had no hope of their ever understanding each other. He also remarked that Sir William persisted in referring to the old editions of Spurzheim's works

(1815), and would take no note of the alterations and modifications which increased experience had introduced in the later editions, although, in a new and estimative science like phrenology, alterations were inevitable as knowledge and experiment were extended, whilst the fundamental principles—namely, that the brain is the organ of mind; that the brain is an aggregate of several parts, each subserving a distinct mental faculty; and that the size of the cerebral organ is, *cæteris paribus*, an index of power or energy of function—remained the same.

Combe's faculties were "fond of system," and his methodical habits enabled him, during the warm discussion of the natural laws and the controversy with Sir William Hamilton, to proceed at certain periods with the study of the German language and of political economy. The commercial distress of 1825-26 had attracted his serious attention to the latter subject, and he was already giving much attention to the currency, the banking system, and the issue of small notes, on which he subsequently wrote with much advantage to the country. He was in no way a man of passions, but of reason; quite apart from phrenology, his nature was remarkably well balanced,—earnest, eager to see the right, eager to do the right, eager to secure the greatest possible happiness in this world and the next for his fellow-creatures; fervently believing in an all-powerful and *benevolent* Creator, and fervently believing himself, from the bottom of his soul, to be an humble apostle of Christianity at the time when he was most loudly accused of infidelity. His motives were always pure and unselfish, and being conscious that they were so, it was when his motives were questioned that his self-esteem was most severely wounded, and that he was apt to become irritable. But even then his faith in phrenology controlled his irritability; he would recognise in the accuser the conditions of mind which made him doubt, and he would be sorry and pass on. His theories of nature made him tolerant of

all human weakness, although they made him occasionally impatient with existing systems of philosophy.

When Dr Welsh was called from Crossmichael to Glasgow he asked Combe to give him some practical hints as to the manner in which he should form his sermons. The reply urged him to be practical ; to apply the doctrines of Christianity to everyday life, and to show his people that the actions inspired by fear of future punishment or hope of future reward were entirely selfish and unworthy of religion. "Preach the great doctrine of love, pure, generous, and disinterested," he said, "and if you can show the Glasgow merchants that the world is so arranged as to cause conduct flowing from this principle to minister also to 8 (Covetiveness), 10 (Self-esteem), and 11 (Love of Approbation), and all other faculties, so as to remove the opposition of these, you will, in my view, be essentially useful."

On the 11th August 1827 Abram Combe died. He had established a community at Orbiston, Lanarkshire, founded upon the principles of Owen's New Lanark ; he had worked hard to make it a success—so hard that he had injured his own health. He had ventured all his own available capital in this philanthropic enterprise, and he had induced several benevolent friends to join him in providing funds for the purchase of the estate, and the erection of houses, schools, and workshops. About £36,000 were expended, and accommodation made for 300 persons. Agriculture and manufactures were to be combined in the industry of the community, and the produce was to be common property. Abram Combe was the active head of the community ; he superintended their work, their amusements, and their education. George Combe says :

"He devoted nearly the whole of his pecuniary resources and time to the promotion of the scheme. For a brief period he rejoiced in the hope of success ; but although still in the prime of life, and of a vigorous constitution, his health gave

way under the influence of excessive physical and mental exertion. This occurred in the beginning of summer, and although Andrew gave him anxious instructions regarding his health, he returned to his labours at Orbiston, and only partially observed them. The consequence was that after a few months of imprudent exertion, he came again to Edinburgh in the autumn of the same year (1826) and was seized with inflammation of the lungs in George's house. The late Dr Abercrombie and Andrew did everything for his recovery that skill and kindness could dictate, and they succeeded in saving him from immediate death. But the malady ended in pulmonary consumption, under which he sank in August 1827."*

For a brief period after the death of Abram Combe an attempt was made to maintain the community at Orbiston under the management of William Combe. But the men worked at their ease, and exacted full pay; the payments exceeded the production, and there was inevitable loss to the proprietors. The latter began to see that they had blundered, and several withdrew from the establishment, which thereupon collapsed. Great loss was sustained by all who had advanced the capital to maintain the scheme, and no good had been accomplished. Combe, writing to William in October 1827, says:—

“I would say that the great error in Orbiston has been the putting the cart before the horse. Communities appear to me to be in harmony with man when highly *enlightened* and *moralised*, when, in short, he is thoroughly acquainted with his own mental condition and its relations to external objects; but not before he has attained to this condition. To produce union and co-operation there must be harmony of principle. Count Rapp and others who have made communities succeed, held the individuals united by strong religious enthusiasm; and any highly moral principle will serve the purpose, although not consistent with reason, if it is wielded by a man of great and commanding mind, who is thoroughly persuaded of its truth himself. The greatness of character subdues and leads feebler minds, just as Napoleon's genius captivated and

* “Life of Andrew Combe,” page 144.

fascinated his soldiers, and led them enthusiastically on to slaughter. In Orbiston you had nothing of the kind. You had the supremacy of reason and benevolence for your principle of union, and it is the best of all, because the only true one; but then it requires very different qualities to produce success from what sufficed in cases like Rapp's. In the latter, extensive ignorance of moral and physical science in the community is rather an advantage, for it leaves the members more open to enthusiasm, and to yield to a superior mind; while in the former case it is the ruin of the scheme, for where ignorance is great, reason and benevolence are necessarily small; and these being the main springs of the association, it cannot by possibility succeed, they being absent. There is a great difference also between *feeling* in favour of union and co-operation, and *intellectually understanding* the principles of human nature and *perceiving how* to suit external circumstances to its wants. I have considered our late lamented brother Abram, and the other founders of Orbiston more in the first condition than the last. In short, as reason and benevolence were to form the bonds of union, the establishment should have been delayed until, by education or books, a sufficient number of individuals had been prepared—by the ascendancy of these principles in their minds—for carrying their principles into practical effect.”

Abram Combe was only forty-two years of age at the date of his death. His short life had been occupied by the ardent pursuit of benevolent objects; like his brothers he sought to do something which might relieve the poor and redeem the criminal. Two days before he died he directed his eldest son, a boy of thirteen years, to write down, that “if *any* epitaph is written on me, it may simply be this—‘that his conduct in life met the approbation of his own mind at the hour of death.’” The words are inscribed on the headstone of the family burying-ground in the West Church graveyard.

During the winter of 1827–28, phrenology occupied a more prominent position than ever in Edinburgh, owing to the controversy with Sir William Hamilton and the discussion on the natural laws. But in Glasgow the Phrenological Society was dissolved, and in London the dissensions of the phrenologists amongst themselves continued. In the smaller provincial

towns, however, societies were in active operation or rapidly being formed. It is noteworthy that about this time, Combe was presented with a pair of silver callipers by a number of ladies in token of their respect for him, as the first lecturer on a serious subject who had admitted their sex to his class.

CHAPTER X.

1828-1830.—SPURZHEIM IN EDINBURGH—HIS CHARACTER—DEATH OF GALL—PUBLICATION OF THE “CONSTITUTION OF MAN”—PREJUDICES AGAINST THE WORK AND THE AUTHOR—THE INFANT SCHOOL—LECTURING IN DUBLIN—EXPERIMENTS AT PUBLIC INSTITUTIONS—DR W. E. CHANNING—PROJECTED WORK ON MORAL PHILOSOPHY—TRUE RELIGION—PRAYER—PROFESSIONAL DUTIES—SCOTTISH JOURNALISTS—FANNY KEMBLE—THE PHRENOLOGICAL ORGANS—LECTURES.

COMBE found much pleasure in the society of Dr Spurzheim during the latter's sojourn in Edinburgh in the early part of 1828. Besides the additional attention which his presence attracted to phrenology, Combe felt deep satisfaction in having the opportunity of studying the character of the man whom he regarded as his master in philosophy. Hitherto their friendship had depended chiefly upon correspondence and their published works. Now they were daily together for several months, and Combe's admiration and respect became almost enthusiastic. Writing to Dr Elliotson, 4th March 1828, he says,—

“Dr Spurzheim has produced an excellent effect here. He has given two popular courses, both largely and fashionably attended; and he has given also a course to eighty students, who have been delighted. He has been incessantly engaged to the parties of the most respectable people in Edinburgh, and has excited high esteem by his great talents, great attainments, and unassuming gentlemanly manners. Mr Scott says he at one time entertained a prejudice against him, but confesses it was from ignorance; that the more he has seen of him the more he has admired him; and that he is now satisfied that he is truly a great and a good man. In all this latter part I most cordially concur. I can testify also that

Dr S. speaks in the very highest terms of Dr Gall; and, both privately and in his lectures, ascribes to him the sole merit of discovering and carrying far forward the physiology of the brain."

Again, writing to Dr Welsh the account of an excursion which he made with Dr and Mrs Spurzheim, Mr W. Ritchie and Miss Cox, to Lochlomond and the Trossachs, he says:—

"Dr S. enjoyed the excursion amazingly. His sentiments came out in the most beautiful and interesting manner, showing a youthfulness and playfulness of feeling, an alertness in motion, and a joyfulness of soul that captivated Miss Cox and highly interested Ritchie and me. . . . I find my pleasure from every object in nature astonishingly increased since I attended to—First, the faculties in man to which the objects are addressed; second, the relation between the object and faculty; and third, that God established object, faculty, and relation with intelligence and design."

Extended observation of the anatomical relation of the organs had induced Dr Spurzheim to adopt a new order of numbering them. The position of the organs remained the same, but the space allotted to several was reduced in size, and places were assigned to Wonder and Eventuality. The changes were seized upon by the opponents of the science as proofs of its absurdity. Sir William Hamilton remained silent, but he supplied a young student, Mr Thomas Stone, with materials for a pamphlet which ridiculed the phrenologists. Combe, in his reply, pointed out that in the modifications which had been made in the new bust "the essential forms and relative situations of all the organs have been preserved."

Dr Gall died on 22d August 1828, at his residence, two miles from Paris. There had been for a number of years a misunderstanding between the two founders of phrenology. But Spurzheim, immediately upon learning that his former coadjutor was dangerously ill, hastened from England to see him. Gall was, however, too weak to see any one except his physician, and he died without a formal reconciliation with his old friend; he had, however, expressed a desire to see him,

and Spurzheim had waited for the first opportunity to take his hand. But the opportunity did not occur. The origin of the dissension between them was this: They had been working together for several years; Spurzheim made various discoveries in the anatomy of the brain, but the credit of them was given to Gall. Spurzheim, whilst acknowledging Gall to be the originator of the science, desired to have his own part in establishing it recognised, and they separated. Gall maintained the system as at first propounded; Spurzheim advanced with experience and new discovery, modified, improved, or altered as he acquired additional knowledge from practical observation; and, therefore, his theories ultimately differed considerably from those of Gall.

To Combe the most important event of the year 1828 was the publication, in June, of the "Essay on the Constitution of Man." He printed 1500 copies, and they were published by Anderson in Edinburgh and by Longman in London. In deference to the evangelical party, he omitted the portions relating to the lower animals, and to human responsibility. He intended the "Essay" to be entirely practical and not doctrinal. He could not understand how the views which he adopted of the natural laws could be in any way opposed to belief in eternity. He asked the friends who lamented his heresy to tell him everything that he recommended them to do which according to their religious views *ought not to be* done, and also to tell him what he had advised them not to do which they thought should be performed. One gentleman urged him, for the sake of his salvation, to renounce the opinions which he professed in the "Essay." This was his answer:—

"I received your very kind and truly Christian letter of 13th March, and gave it all the consideration which so important and friendly a communication required. It may be proper to inform you that I was religiously and evangelically educated; have been from my infancy familiar with the great standards of our national faith; have read the best authors who expound it, and am no stranger to the contents

of the Bible. I have always sat under evangelical preachers, and still have seats in Dr Gordon's church. During the greater part of my life, I have been most punctual in my attendance at church, and up to this day make it a rule to do no business on Sunday. I have examined religion and reflected on it, in singleness of heart and with a sincere desire to find the truth; I have discussed the different views of it that pervade society with divines, philosophers, and men of plain understanding; and, in short, have used every lawful endeavour to understand and to arrive at a sound judgment on the subject. The result has been the attainment of views in religion that harmonise with all my faculties, that afford the greatest comfort and consolation to my mind, that animate me in active life, sustain me in adversity, and afford ample satisfaction as to the future. That these views may differ in some of their shades from those which you embrace is highly probable, because our minds differ; but that their great basis is the same appears to me obvious from the perfect harmony between your practical spirit and mine. In matters of faith, then, my dear sir, let each of us follow that which appears to himself best. According to my views you are of an excellent spirit, and have no cause to fear as to salvation. If you can possibly extend the same good hope as to me, I shall be well pleased, and your own benevolence, I am certain, will be gladdened. But if your conviction forbids this, then I am not offended, but trust that your fears on my account may ultimately be disappointed."

He did not feel that he was affected in his profession by the "Essay;" but socially the prejudice against him was very strong. When Dr Welsh had a call to Edinburgh Combe dared not openly assist him, because his advocacy would have been injurious to his friend. The evangelical party regarded him as a dangerous infidel, and would not be associated with him in anything, however good the object. An effort was made in the Phrenological Society to force him to discuss the questions raised by his theories on the natural laws. Such a discussion would have resulted in the disruption of the Society; but he resolutely refused to involve it in his personal opinions, and remained silent. The persecution to which he was subjected, even in his efforts to further objects which were

universally acknowledged to be good and wise, is revealed in the following letter to Dr Spurzheim, 20th January 1829:—

“Much has occurred about the ‘Constitution of Man’ since I wrote you last. In September 1828, Andrew and I, in returning in a steamboat from Port-Patrick to Glasgow, met Mr Samuel Wilderspin, the teacher and advocate of infant schools. I invited him to come to Edinburgh. He came in November; I gave him the Clyde Street Hall free to lecture in, introduced him to Ritchie and Maclaren of the *Scotsman*, to Mr James Bridges, &c., and got the public mind roused to the resolution of forming an infant school here. A committee was named to carry this resolution into effect. At that committee Bridges was told by some evangelical individuals that my name and interference would shipwreck the measure; that I had published an infidel book; and that if I did not withdraw, they would. Bridges reported this to me. The only question I put to him was whether the objectors could carry the school into existence if left to take their own way. He replied yes. I then authorised him to announce my withdrawal, and I begged of Ritchie and my other friends to acquiesce in this. After deliberation they said that religious liberty had been invaded in my person, and they would not submit to my being turned aside. Mr Simpson and Mr L’Amy acted with Ritchie. At the next committee meeting Mr L’Amy proposed that Moderate ministers of the Church of Scotland, Episcopalian ministers, Dissenting ministers, a Quaker, a merchant—both named,—and I should be added to the committee. This was opposed and put to the vote. The evangelical party was out-voted. They retired, Ritchie, L’Amy, and Simpson took the lead, and got men of all parties,—Whigs, Tories, Moderate ministers, Dissenters, &c.,—to come forward to a large public meeting, and the establishment of the school was agreed on. At choosing directors of the school another attempt was made to exclude me as an infidel, but Ritchie again defeated it, and I am an extraordinary director. Meantime, through all the town the cry is raised that the infant school is an infidel and phrenological job. But, nevertheless, the scheme goes on, and my book is selling all the better for the discussion.”

In April 1829 he accepted the invitation of fifty inhabitants of Dublin to lecture in that city. He delivered sixteen lectures to an audience averaging 150 in number, and including

clergymen, physicians, barristers, fellows of Trinity, and ladies. The first lecture was free, and was attended by 500 persons. Combe noted that Government gave the Royal Society of Dublin £7000 annually to provide lectures on science gratis to the public. This had created a taste for lectures, but a great distaste to pay for them. He was, however, gratified by the attention of his audiences; and his reception, socially and publicly, was of the most cordial character. Whilst in Dublin he heard much of the Catholic emancipation question; and the following anecdote refers to the bishops of the Irish Church and William IV. :—

“They have a story here against the Archbishop of Dublin and his compeers, who lately went to Windsor to petition the king against emancipation. The king harangued them for two hours, as they say, using the expression: ‘*We—we, we are hurried on by force.*’ ‘*We are overborne by a masterly hand,*’ which ‘*we*’ was so used that they, in indignant sympathy, thought that it indicated His Majesty and his Protestant bishops collectively, as all victims of dictatorial power in the Duke. The king wept at the outrage done to his excellent Protestant subjects in Ireland, and he wound up the whole by a long pause, followed by an exclamation—‘*Good God, if it should come to depend on us! If the Upper House should yield to this compulsion, and throw the whole burden upon us!*’ Another long pause, during which the bishops expected him to say that he would brave everything and withhold his assent; but His Majesty at length concluded—‘*But let us not anticipate. My lords, if it should come to such an awful crisis—we shall trust in Providence!*’ It is said that the blank disappointment of the bishops at hearing his Majesty magnanimously resolve to trust in Providence, was most unclerical; but they got no other answer.”

He visited Mercer’s Hospital, the Richmond Lunatic Asylum, and the Penitentiary, and at each of these establishments he made observations on the inmates, which afforded remarkable evidence of the value of phrenology in defining character. At the Hospital he was desired by Surgeon Auchinleck, in the presence of twenty medical students, to examine the head of a woman who was presented as a con-

valescent patient. He found the organs of Amativeness, Philoprogenitiveness, Combativeness, Destructiveness, Love of Approbation, and Cautiousness all large, whilst Hope and Conscientiousness were deficient. He was asked what combination of faculties indicated a tendency to suicide, and he referred to the observation in his "System of Phrenology," that "Dr A. Combe had examined a considerable number of suicides in the Morgue at Paris, and found in them Hope generally small, with Cautiousness and Destructiveness large." He was then informed that the woman had twice attempted suicide. Combe said that he believed the cause of the attempts would be found to be connected with the domestic affections. On inquiry being made it was discovered that jealousy of her husband had been the cause of her acts on both occasions.

At the Asylum he was requested to examine a number of patients whose peculiarities had been previously written down by the physician of the establishment, Dr Crawford; and the latter proposed that his notes and Combe's remarks should be afterwards compared. Combe agreed to the experiment; twenty-three cases were examined, and the agreement between the results obtained by Combe in his phrenological observations, and those of Dr Crawford obtained from personal experience and observation of the patients, was very striking. It will suffice to give one case as an illustration of the experiment.

MR COMBE'S REMARKS.

"Patient's name, Lynch. Largest organs: Self-Esteem Wonder, Causality, Language, Combativeness. Also large: Amativeness, Philoprogenitiveness, Concentrativeness, Acquisitiveness, Love of Approbation, Firmness. Full: Veneration. Deficient: Conscientiousness. Mr Combe said that he considered Wonder, which, when diseased, gives notions of supernatural agency and inspiration, and Self-Esteem, as probably the leading sources of alienation in this case; that Causality and Language should also be conspicuously manifested."

DR CRAWFORD'S REMARKS.

“Patrick Lynch, aged 42, a cooper. Two and a half years ill. Married and has children. Monomania. *Religious pride*, with vivid imagination, and the highest degree of excitement, requiring restraint; fancies himself inspired and endowed with omnipotence; frequent hallucinations; visits from heaven, &c.; great flow of language in a style quite superior to his rank in life; drinking the cause of his illness; second attack.”

The case is taken at random, and is not the most remarkable of the illustrations quoted. At the Penitentiary similar experiments were made with similar results, and they were fully reported in the *Phrenological Journal*, vol. vi. p. 75.

In estimating the value of these experiments, however, it must not be forgotten that in diseased or abnormal conditions of the brain the indications of character which mere development would afford must cease to be reliable. Hence, in Lunatic Asylums many cases must occur in which development and character will not be found in harmony. This fact has been frequently overlooked, both by professed phrenologists and inquirers into the value of the phrenological doctrines.

One important effect of Combe's visit to Dublin was the establishment of a phrenological society there, with representatives of the clerical, medical, and legal professions amongst its office-bearers. The society worked vigorously, and, by the influence of Combe, Spurzheim was induced to deliver a course of lectures in Dublin in the spring of the following year, which attracted large audiences, and excited new interest in the science.

On returning to Edinburgh Combe resumed his professional duties with his customary assiduity; and he had an extensive correspondence to maintain in defence or explanation of the theories he had advanced in the “*Constitution of Man.*” The work had brought him into contact with Dr W. E. Channing, and it was particularly gratifying to him to receive from that gentleman a copy of the American edition of the “*Essay,*”

which was issued with an appreciative preface by Dr Channing's brother, who was in the medical profession. This proof that the book was considered useful helped him to bear with equanimity the hostility which it had engendered towards him in certain circles at home. But, indeed, he had now such a wide circle of admiring friends and followers, and had so many subjects of serious interest to occupy him, that he suffered little from the loud condemnation of his opponents. He endeavoured to answer arguments, and to satisfy those who doubted, but he remained calm under all dogmatic reprehension.

"My principle of action is this," he said: "If a man injures me, I attribute it to misinformation, or unfortunate development; if when the evil is pointed out he has so much morality as to agree to repair it (not to apologise, for this is a sacrifice to Self-Esteem and Love of Approbation which I never ask), I am satisfied, and am willing to regard him still as a friend. If he has not morality enough to do me justice voluntarily, I harbour no resentment, but hold myself bound to avoid all future connection with him, and to do myself justice with as little pain to him as possible."

He was at this time maturing his plans for his work on moral philosophy, and in a letter to Dr Channing, 18th June 1830, he gave the rough draft of his project:—

"I have the impression that morals and religion are at present in the same state as that in which the physical sciences existed prior to the practice of the Baconian philosophy. As astrology to astronomy, or alchemy to chemistry, so are the present systems of religion and morals and political economy, as branches of the science of man's nature, to the real science of man, which is in part unfolded, and will in the future be completely developed by phrenology. In the works on human nature now existing, there is much of truth, but very little evolution of the principles of it, in the explicit knowledge of which its consistent application appears to me to depend. I have projected an outline of a system of moral philosophy, but feel myself unequal to the execution of it, the mere stating of which, however, will communicate my views. It would be divided as follows into branches:—

"Branch 1. Exposition of the physical structure of man,—

bones, muscles, blood-vessels, nerves, brain, organs of digestion, and organs of respiration. The structure and functions of these should be unfolded; their diseases; the physiological laws which regulate them; the effects of their impaired and over-exalted condition; their mutual relationship; and their relation to the mental functions.

"2. The organs of the mind, their uses, legitimate sphere of action, abuses; the external causes which diminish or exalt their action; the internal causes which diminish or exalt their action; their relationship to each other and to external objects.

"3. From these premises we could deduce the duties of man as an individual, trace man from birth to death, compare him with the laws of his nature, and show that the extent of misery suffered by aberrations from them is enormous. For instance, more of the human race die during the first two years, by fourfold, than of any other of the more perfect animals, excluding external violence in both instances. This can result only from gross ignorance, because man is equally well formed with the lower animals, and his reason ought to protect him more completely against accidents. These deaths can be traced to—1. The bad condition of the parents at the time of producing the young; 2. The profound ignorance manifested in their treatment after birth. Again, it is rare to meet with a man or woman in civilized society in the perfection of health, and living in a mode calculated to preserve it. This arises from philosophy and religion having been metaphysical, abstract, imaginary, and too little conversant with the real nature of man and his wants.

"4. The duties of man in his private relationship. In tracing the mass of human life as at present exhibited, how much misery is inflicted by erroneous education; by marriages at variance with the laws of nature; by irrational pursuits in life, which must be remedied by the knowledge of the science of man, or not at all. Religion has hitherto left the young of every sect the prey of the priests and fanatics of that sect to which they belong. It has shed no light upon the effects of the parents' constitution on the mental and physical constitution of the offspring, or the causes of sickness from constitutional inheritance. It has not enabled individuals to know the qualities of their lovers whom they mean to marry. It has not served to regulate the pursuits which constitute the business of life in harmony with its own precepts. All this deficiency appears to me to arise from its not being aided by philosophy.

“ 5. The duties of man as a member of society. In this particular matters are farther from reason than in the preceding instances. A well-constituted society should be arranged so as to promote the healthy action of the physical and mental powers of its members, and present obstacles to practices injurious to them. At present the reverse is the case. Every facility is afforded to the workman to labour or drink himself to death, and every obstacle presented to his labouring moderately, cultivating his intellect, and refining his moral affections and emotions. To the merchant, the lawyer, divine, and philosopher every institution, feeling, and habit of society is favourable to the destruction of health by excessive application, which is rewarded externally by wealth, consideration, and power, but punished internally by feebleness of constitution transmitted to children, disease, and premature death; to the debasement of the higher powers of the mind by the pursuit of gain, or popularity founded on supporting the prevailing opinions of the day, and absolute obstacles are presented to those classes of men living, acting, speaking and thinking conformably to the dictates of enlightened philosophy and true religion. A correct knowledge of man aided by religion aiming at the good of man, would lead divines to teach and put in practice every rule that could advance human beings in the scale of rational creatures, founded on their real nature.

“ 6. Man's duty to God. At present the prevailing opinion is that man is sent into this world to promote the glory of God for God's gratification. In reading the works of divines, in which laborious duties are spoken of as *services* to be performed to God, in which zeal for God's glory is extolled as the grand principle of action, and in which the matter of salvation from God's wrath is represented as a business of awful magnitude and importance, I cannot help feeling that religion is utterly misunderstood; that it is just a great system of astrology, and that the greatest injury is done to society by its continuing to misdirect the talents, labours, and time of a vast and intelligent portion of the community. The foundation and superstructure being erroneous, religion has produced enormous evils, and been modified in its character by advancing lights of philosophy, but rarely led the way in improvement. Yet religion is part of man's nature, is his highest delight, and is calculated to confer on him his highest dignity and enjoyment. Its proper object appears to me to be to embrace within its circuit every interest of man, to direct the mind to the divine origin in the constitution

of the human being and external nature, to the legitimate use of man's functions as being the true will of God, to every abuse of these as being transgressions of that will; and to God as being in all instances a kind Creator, a benign Father, and an all-wise Ruler of the world, who instituted man that he might enjoy the felicity of his rational nature, and who exacts no service except that obedience which it is man's highest advantage to give. I covet your eloquence to do justice to this theme. You have my gratitude for what you have written on it. If you could only get your eyes opened to the indispensable necessity of commencing all substantial improvement of man by studying and teaching his nature practically, and set the example of doing so in your sermons, you would unspeakably benefit your race. Break the spell of teaching only abstract morality and religious feeling from the pulpit, and fairly commence a system of teaching of anatomy, physiology, and mental philosophy, as the groundworks, and then rise through the topics here pointed out as applications, and you would sow seeds which time would ripen into a great harvest. While you proceed on the old plan you may delight, instruct, and lead to virtue the few who fall within the sphere of your personal influence, or whose high moral organs enable them to comprehend your books, but you will never reach the springs of conduct in the mass of the labouring and money-making population. It is only superior natures whose sympathies respond to yours; teach first principles, and you will erect standards by means of which men less gifted may discover at least their shortcomings, and consent to be directed by higher views than their own."

Dr Channing was in ill health, and had gone to recruit at St Croix, in the West Indies, when the above letter reached America. The answer was consequently delayed nine months. Writing on 11th April 1831, Dr Channing, after explaining the cause of his silence, and that he had not yet found time to study phrenology, proceeds:

"You wrote me on another subject of far higher interest [than phrenology], on which I could not have given you my views without covering many pages or sheets, and this, you may suppose, I was willing in my want of health to defer. I refer to your outlines of moral philosophy. Your opinions on this first of sciences seem to me very valuable. With many of them I entirely accord. That our physical nature

has been too much overlooked by those who have treated it I fully agree. That its end and means have been very imperfectly understood is equally true. It is my hope to do something in this field; and I should undoubtedly differ from you in some important particulars. You would place me among the 'abstract' authors, who do not study and teach human nature, 'practically,' and very possibly you would censure me with some reason. I earnestly wish that you would supply the defect by executing your own plan. You doubt your ability; but the conception of it shows that you have no reason for fear. But I must not trust myself with the subject. . . . The success of your 'Constitution of Man' in our country has been such as must gratify and reward you. It has found general favour. The Swedenborgians (who, in fact, republished it) are particularly interested in it, why, I know not, for I read few of their books. I have heard high commendation of it from a distinguished Calvinistic divine, and as to the more liberal classes, they have highly approved and recommended it. Some of its doctrines have found the way into the pulpit. I have met on this island a lady from America, of much distinction in the fashionable world, who had brought it with her as a text book, and lent it very freely to the intelligent here. She tells me that a gentleman of Philadelphia bought 50 or 100 copies of it—all he could find—for distribution, believing that he could not do more good. The common remark, however, is that the book is excellent, in spite of its phrenology."

Although Dr Channing's approval of his projected dissertation on moral philosophy afforded encouragement to Combe, he did not attempt to realise the conception until five years after he had written his preliminary sketch of it. He had in 1822 declared to a friend that he would never pursue any path, the end of which was mere personal gain; and in all his undertakings his leading inspiration was the desire to benefit his fellow-creatures. This element of his character caused him to hesitate, and to meditate long before he took any decisive step in philosophy or business; and the firmness with which he followed the course his deliberations had determined as the best, often blinded even friends to the deep consideration which he gave to every subject affecting human conduct. It was in 1835-36 that he attempted to formulate his ideas of

moral philosophy into a system, and then it was only attempted as a series of lectures delivered in the evenings to the working classes. But the lectures were published in the United States as a complete system; and during his sojourn in America (1838-1840) he revised and amended the work, and issued it with an affectionate dedication to Dr Channing. On his return to England he republished the work here, with further amendments and additions.

His Moral Philosophy is simply an expansion of the doctrines expounded in the "Constitution of Man." As in the latter work, he sought to reconcile religion and nature—God's laws and man's ways; so in the former he endeavoured to give practical applications to the enlightened principles which should regulate social intercourse and duties. His note books and letters show how earnestly he meditated daily on the great problems of religion and life; and how, step by step, he advanced to the convictions which are explained in his works,—convictions which at the time obtained for him the epithet of "infidel," although now his theories are accepted without question. In 1828 he wrote—"In my humble opinion, a new translation and a new interpretation of the Bible will take place in half a century, and it will then be received in reference to the actual nature of man in general, and not in reference to any individual, however great his talents." He was writing of Calvin and Socinus when he made this observation. The new translation which he foresaw would be demanded is now in progress, and the highest dignitaries of the Church are engaged upon it. His ideas of religion had assumed definite form in 1828, although he did not publish his theory until many years later, when time and increased experience had matured his views, and satisfied him that he had something to say which would be useful to mankind. It is desirable to show here the broad principles he adopted at the time when he was moving in a circle in which the least deviation from the evangelistic doctrines was regarded as "implicit

atheism." The following is from one of his private note books; date, 1st September 1828:—

Religion.

"What is the end of religion? To obtain salvation will be the common answer. How is salvation to be obtained? By faith in Jesus Christ, and by practising morality, as at once the evidence and result of that faith. What is salvation? Deliverance from God's wrath and curse, to which we are exposed on account of original sin and actual transgression; and being made partakers, through grace, of eternal felicity in heaven. These ends, then, are purely selfish. Punishment is an object of fear, on account of its painful and distressing nature; eternal happiness in heaven is an object of desire, as implying the highest gratification.

"The former is a base motive. It is impossible to love a Being whom we fear; and habitual consciousness to liability to eternal misery enslaves the mind, and renders it unfit to entertain generous emotions. The desire of heaven may be elevating or degrading, according to the notions formed of the state of being to be realised there. If sensual pleasures are expected, as by the Mahomedans, it debases; if purity and intelligence are regarded as the grand sources of enjoyment, it ennobles.

"The practical effect, then, of any particular religion will be good or bad according as it maintains the higher or the lower faculties in habitual activity. Fear maintains Cautiousness, but it chills Benevolence, Veneration, Hope, Conscientiousness, and Intellect. The desire of heaven, if a mere abstract undefined aspiration after happiness, will cherish a dreamy, imaginative frame of mind, much more allied to selfishness and superstition than to practical holiness and virtue. Every idea that by our religious services we can benefit God, enhance his honour, his glory, or his happiness, is the emanation of pure self-esteem, unenlightened by reason and unsubdued by real piety.

"True religion must be based on the following principles:

"God exists: He created man that he might be happy. Man can be happy only by exercising all his faculties under the supremacy of moral sentiment and intellect. Religion, therefore, consists in seeking to discover and obey the divine laws, from conviction that they alone are suited to gratify all our faculties. Adoration of God is a pleasure vouchsafed to man; but to *praise* God, with the view of pleasing *Him*, is highly erroneous.

“The necessity of salvation is a discovery of Revelation alone. Nature gives no hint of it. It is said that man’s wickedness is obvious—that he feels punishment due to him; and that he needs a Saviour to deliver him from it. But would it not have been better to put an end to sin, than to allow it to go on and provide a means of escape from its consequences? The miseries in this world induced by sin are an enormous evil, supposing every soul saved at death. Why, then, not put a stop to iniquity? It is said that faith in Christ and the aid of the Holy Spirit will do so. But facts refute this assertion. H. G. and Dr A. sinned according to the development of their brains, after having been for many years ministers of Christ’s church and preachers of His word. Philosophy informs us that the way to diminish, and, if possible, to eradicate sin, is to amend the brains of the race, and adapt external circumstances to their brains, so as to produce the desire of virtue and intelligence, and to render the fulfilment of this desire possible.

“The religious organs are parts of the brain, of the mental system; they must be in harmony with the others, and placed there to regulate them. Religion, then, ought not, as now, to be a speculative, metaphysical system of belief, but a compendium of moral and practical duties, embracing every function of man, supporting the right use of these functions, and prohibiting the abuse of them as the will of the Deity.”

Following the same train of thought, he wrote on the subject of Prayer:—

“Under the natural laws everything is arranged harmoniously with the constitution of man; and our only prayers require to be that we may discover what is right, and act up to it, in perfect assurance that God’s blessing will inevitably follow, because He has arranged blessings as the consequences of knowing and obeying His laws. His laws are in harmony among themselves and with the whole constitution of man; and hence those who pray in this spirit can never put forth contradictory petitions; and they avoid the impiety of supposing that God requires to be solicited by men in order to act with kindness and justice towards them. The result of the opposite principles is glaring absurdity. All individuals on earth should appear, according to it, every morning at the throne of grace, requesting God not only to do what is right as to them, but to amend the errors of their neighbours. The Mahomedan prays God to convert the Christian; the Christian asks Him to convert the Mahomedan; the Catholic prays that the Protestant may be

converted ; and the Protestant prays that the Catholic may be led to see the error of his ways. The French pray to God for success to their arms in the just and necessary war in which they are engaged ; and the English put up an exactly similar petition ; the two nations being enemies each thanks God for a victory, and pretends that He was on their side. In short, reason and sentiment are outraged and set at defiance. Those are the results of a false system."

In a letter to a correspondent in Glasgow (Thomas Watson, merchant), written at the same time as the foregoing, he continues the subject :—

"I may mention that my view of religion admits of prayer, but in a different sense and spirit from yours. My prayers are bounded by this :—That I may be enabled to obey in all things the will of God, and fulfil His laws, and teach and help others to do the same ; but I never petition the Almighty that he should operate on your mind to cause it by His agency to entertain the same opinions as I do ; because, first, this would be assuming in presence of God Almighty that I am infallibly right, which I am not so presumptuous as to do ; secondly, it would imply that God required to be asked by me to shed His grace on you—a sentiment which would be more replete with Self-esteem on my part than Veneration towards Him ; and, thirdly, if God heard your prayers to convert me to your opinions, and mine to convert you to mine, and saw that the petitions were contradictory, and that both of us were fallible men, He (we may presume) would be better pleased that each of us should limit his prayer to "Lord be merciful to me, a sinner," and searched his own mind for his own errors, than returned Him thanks that he was not like his neighbours which he really does when he prays for his neighbours amendment in matters not of obvious practice but of pure belief."

Whilst he was writing the foregoing views of religion, Mr Campbell, the minister of Rowe, near Helensburgh, was creating a ferment in Edinburgh by preaching "that *all* men are instantly pardoned the moment they believe they are so, through Christ's atonement. This is called the universal pardon heresy, and has excited great horror among the orthodox. Another heresy is that Christ was not free from the imperfections of humanity,—a doctrine equally terrific in the

eyes of sound believers. The Pardonists work miracles, and, it is said, even attempt to walk on the water. In short, the interest excited and numbers impressed by these doctrines are disgraceful to the age and country, and afford additional evidence to much previously existing, that religion has no secure basis while severed from philosophy. The want of education in natural science, and especially in that of mind, is evidently one great cause of these miserable exhibitions."

But although his mind was thus seriously occupied, his routine of daily duty was performed with conscientious fidelity. He gives an indication of his work at this period in a letter to a Dublin friend (Mrs Kemmis). "Yesterday a literary friend called and found me immersed in a bundle of title deeds. He asked what I was doing. I told him I was going to prepare a mortgage in favour of a client for a sum which he was lending over heritage in Edinburgh; that the wisdom of our ancestors had invented a system of conveyancing, as it is called, by which title deeds are rendered long, intricate, and troublesome beyond all necessity; that a blunder in any essential form or expression is fatal to the right; and that I was answerable to my client that no blunder existed in all that mass, and had no alternative but to begin and read them through and through, with an eagle eye to every objection that could be urged by legal ingenuity against them. They had cost me eight hours labour at that time, and have occupied other two since. Now, the mind chained to such work, day after day, and feeling the unspeakable wickedness of slurring it, and thereby inducing the ruin of the widow, perhaps, and fatherless children who are investing their whole means of support in a mortgage or in a purchase, and alive also to the personal loss and professional disgrace that must follow from any serious error, is really not capable of making voluntary efforts in literature and philosophy at the times and to the extent which it would wish. I do not complain of my own lot as hard, but quite the reverse; compared with many men

I have been fortunate in falling into a place in society which my faculties suit ; and I hold myself bound to discharge the duties of a private individual before volunteering into the public service. But it is impossible not to lament the system of society, as at present constructed, which binds down so many minds to most irrational, uninteresting, unprofitable (in a moral and intellectual sense), and irksome employments. So much egotism is inexcusable except as an illustration of the operation of the present order of things ; and to you whose mind extends itself over all the interests of society, the application will justify, or at least, I trust, help to excuse the introduction of so much of self."

The lighter moods which relieved his more serious life are shown in his letters to his niece, Miss Robina Cox, who was at a boarding school in Liverpool. In the former we see his devotion to his profession, his deep sense of responsibility ; in the following we find him "at play":—

"My sweetheart's birthday was on 17th October, and we had famous fun at Clermiston. We played at seeing Harry, and a certain elderly gentleman whom you know chased the young ladies through the room with his hands tied behind his back, was tripped by a small sofa, tumbled over on it, and then rolled on the floor, to the inexpressible delight of the 'bairns' male and female, whose Self-esteem was exceedingly rejoiced to see age, gravity, and philosophy rolling on the carpet like one of themselves." The letter concludes with playful allusions to the mere gossip he was writing, instead of giving her grave advice, and is signed "your loving uncle Grey-head." But in other letters to the same young lady, whilst supplying all the news of home, which would be most interesting to her, he also indicated the course of study which would be most advantageous to her, and he especially recommended the study of physiology.

Scottish journalists of fifty years ago were apparently, like their French compeers, occasionally disposed to settle their

disputes by means of a more effective weapon than the pen. In 1829 the *Caledonian Mercury* contained certain statements offensive to the conductors of the *Scotsman*. A reply was given which provoked a rejoinder, and in the end Mr Ritchie of the *Scotsman* sent a challenge to Mr Allan, the proprietor of the *Mercury*. Combe endeavoured to arrange the matter amicably, but failed, after doing all that he might do with due regard to Mr Ritchie's honour. The authorities, however, became aware of the proposed duel, and interfered. But this only resulted in changing the combatants; Mr Charles Maclaren took the place of Mr Ritchie, and Dr Browne (the editor of the *Mercury*) that of Mr Allan. Combe writes to Dr Welsh, 12th November 1829:—

“ I presume you have seen the details of the quarrel between the *Scotsman* and *Mercury*. Yesterday Mr Thomas Allan and Mr Ritchie were bound over to keep the peace. Mr Maclaren and Dr James Browne were not bound. Mr Maclaren wrote B. a letter acknowledging himself as the author of the article exposing B.'s character in the *Scotsman* of yesterday. This was at half-past nine A.M. It was half-past four before any message came to Maclaren. Then Mr Alexander Peterkin appeared as Browne's friend. Maclaren named Lawrence Macdonald, the sculptor, as his second. I happened to be in Ritchie's house inquiring into the state of affairs when Peterkin called at Maclaren's, and, at the request of our friends, remained. An appointment was made to meet in a coffee house in Hanover Street at 7 P.M. We all went there. Mr Peterkin and Mr Macdonald entered into a regular discussion, which was all written down as it proceeded. It ended in a hostile meeting being arranged. The parties fought this morning at 7 o'clock in a field on the Ravelston road, north of Coltbridge. They fired once, and both missed. Peterkin asked M'D. if he had anything to say. Mr M'D. replied, No. Peterkin said he thought enough had been done. M'D. said that Maclaren had no animosity and had nothing to avenge, and if Peterkin thought it was enough, he concurred. Peterkin then said 'we declare the affair ended,' no demand being made on either side, and no concession offered. Maclaren and Browne then bowed to each other, and the respective parties drove off.”

The appeal to arms having thus ended without bloodshed,

no serious consequences followed. Mr Allan, who was apparently of a less warlike disposition than the conductors of the *Scotsman*, appealed to the civil courts for damages against Mr Ritchie, but the dispute was arranged by a compromise.

In 1830 the Edinburgh commissioners of town improvements purchased Livingston's yards for the construction of the road which now connects the Castle Terrace and the High Street. The brewery was thus closed, and George Combe was not sorry.* A variety of misadventures had rendered it to him troublesome and unprofitable from the beginning. Although he had displayed much skill in the management of the brewery, and had at an early stage of his control invented a machine for regulating the fermentation, which saved much waste, still waste and bad debts accumulated, and he felt that without giving his whole attention to the business it would never pay. Now it was satisfactorily removed from his path. The commissioners paid for the ground £9650; of this sum £1650 fell to George, and the balance was apportioned to his brothers and sisters, in accordance with agreements they had entered into when he and Abraham had first undertaken the whole responsibility of the brewery. William, who had been the last manager of the establishment, had emigrated to America, and was there trying his fortune as a brewer,—with ill success for sometime, but ultimately with satisfactory results to himself and his family.

It may seem strange that a man so earnestly engaged in the practical affairs of life, with constant demands upon his time and attention in business and friendship, and so constant in his thoughts of religion and duty, should find time to dally with Thespis. But from that first visit to the theatre which he has described in his autobiography, he displayed a liking for the stage, and a sincere respect for its professors. The stage, indeed, shared with all the arts his deep admiration; and whilst he was discussing with one friend some knotty point of

* See note, page 2.

philosophy or theology, he was discussing with Fanny Kemble the characteristics of Juliet, or with Mrs H. Siddons her latest exposition of one of Shakespere's heroines, in contrast with the phrenological indications which he read in the lines of the character. For Miss Kemble he entertained great respect, and in his own house and elsewhere he endeavoured to inspire others with his admiration of her genius. He entered into long arguments with her as to the truth of her interpretations, considering it on poetical and philosophical principles, and although they disagreed in details, they agreed on the distinguishing elements of character.*

Writing to her on 23d July 1830, he makes the following observations on

Reading and Acting.

“There are two kinds of reading,—one for the gratification of the feelings, just as dram-drinking is for that of the body; and the other for the cultivation of the intellect, which resembles exercise to the body as a species of stimulus contradistinguished from dram-drinking. Sentimentalists of all kinds, whether pious, novel-reading, or poetic, belong to the first class; persons of sound sense and philosophic understandings to the second. The first read only subjects soothing or stimulating to their predominating faculties, which are thereby exalted into more fervid and irregular action; and that vigour of mind and sobriety of feeling which fit for practical usefulness are in proportion diminished. The second read subjects which have relation to human nature, to life and its duties, and which may serve to regulate or moderate all faculties which are too active, and stimulate those which require enlarged action. In this kind of reading difficulties are met with, which the intellect has to struggle with to over-

* The following remarks are quoted from the Reminiscences of Mrs Frances Anne Kemble, published in the *Atlantic Monthly Magazine* of 1876, under the title of “An Old Woman’s Gossip.”—“In spite of my inability to accept his science of human nature, and my impertinent practice, which he always laughingly resented, of calling *organs* by the unvenerable name of *bumps*, Mr Combe was always a most kind and condescending friend to me. He was a man of singular integrity, uprightness, and purity of mind and character, and of great justice and impartiality of judgment; he was extremely benevolent and humane, and one of the most reasonable human beings I have ever known. From first to last my intercourse with him was always delightful and profitable to me.”

come, but this struggle gives it strength ; the subjects are often least pleasing at the first, but become interesting in proportion as they are understood. The mind in such studies strikes out multitudes of ideas of its own, and feels itself increasing at once in its stores of acquired ideas, and in its capacity to combine them and originate others. You have the temperament of genius (the nervous and bilious), and you have a favourable combination of faculties, so that you act, write, think, and feel in a very superior manner by pure instinct ; but instinct in man is still the same species of inspiration as in the lower creatures, it goes a certain length and stops ; but reason, with gifts like yours, advances till a very late period of life. Now, the difference between Juliet acted from instinct and from instinct exalted by study, is this, that in the first case the representation is one of feeling chiefly ; in the second, it is feeling combined with powerful intellectual conceptions. You will, I am pretty certain, understaud me, although not very definite in my explanation. The first will please best those persons who have powerful feelings and less cultivated intellect ; the second will charm those who have much feeling, with vigorous intellect combined. I had the impression that the Grecian daughter was more embued by intellectual conceptions than Juliet,—that it had cost you more study to comprehend it, and that your intellect required to act more intensely throughout its representation, and in Edinburgh it was the most successful of all your characters. By studying over every character, and reflecting on its aspects, trying to discover what elementary qualities of mind it embodies, to what precise combination of them it owes its individuality, how the external circumstances are related to it, how much in it is instinct, how much intellectual impression, how much temperament, and what the temperament is, you will find it growing on you in intellectual bulk, and this will give your representation of it more body,—the soul always being furnished by your instinctive feelings and vivacious temperament. Here, however, you must feel the want of a philosophy of mind furnishing you with scientific and correct principles, and I can add that you would also be greatly aided by a knowledge of the elements of physiology, which explain the temperaments, and the effect of physical influences on the mind. Phrenology contains more of this information than all other systems with which I am acquainted.”

In 1830 the third edition of the “*System of Phrenology*” was published, and as it is desirable to note the alterations

and modifications of the nomenclature of the organs, subjoined are tables showing the numbers adopted in the first and third editions of the work. In reading them, however, it must be borne in mind that the *positions* of the organs were not altered, although the space allotted to them was reduced in some cases, and the numbers consequently changed.

SYSTEM OF PHRENOLOGY.

1st edition, 1819.

1. Amativeness.
2. Philoprogenitiveness.
3. Inhabitiveness.
4. Adhesiveness.
5. Combativeness.
6. Destructiveness.
7. Constructiveness.
8. Covetiveness.
9. Secretiveness.
10. Self-Esteem.
11. Love of Approbation.
12. Cautiousness.
13. Benevolence.
14. Veneration.
15. Hope.
16. Ideality.
17. Conscientiousness.
18. Firmness.
19. Individuality.
20. Form.
21. Size.
22. Weight.
23. Colouring.
24. Locality.
25. Order.
26. Time.
27. Number.
28. Tune.
29. Language.
30. Comparison.
31. Causality.
32. Wit.
33. Imitation.

3d edition, 1830.

Affective—I. Propensities.

1. Amativeness.
2. Philoprogenitiveness.
3. Concentrativeness.
4. Adhesiveness.
5. Combativeness.
6. Destructiveness.
- Alimentiveness.
7. Secretiveness.
8. Acquisitiveness.
9. Constructiveness.

II. Sentiments—

10. Self-Esteem.
11. Love of Approbation.
12. Cautiousness.
13. Benevolence.
14. Veneration.
15. Firmness.
16. Conscientiousness.
17. Hope.
18. Wonder.
19. Ideality.
- ? Unascertained.

20. Wit or Mirthfulness.
21. Imitation.

Intellectual—I. Perceptive.

22. Individuality.
23. Form.
24. Size.
25. Weight.
26. Colouring.
27. Locality.
28. Number.
29. Order.
30. Eventuality.
31. Time.
32. Tune.
33. Language.

II. Reflective—

34. Comparison.
35. Causality.

After the publication of the third edition of the "System," Combe made no further alterations in the numbers or nomenclature of the phrenological organs, those in the fifth and last edition (1843) being the same as those in the third. In any future references to organs in the course of this work the numbers used will be those adopted in the latter editions of Combe's "System of Phrenology."

On its appearance in 1830 the work again found a quiet but steady sale; still the position of the science in public estimation was not encouraging; its interest had somewhat abated; and the influence of the evangelical party withdrew numbers of members from the Edinburgh Society, and prevented others from joining it; the funds were so low that it was absolutely insolvent, and had not paid a year's rent for the hall. As Combe was the landlord, the latter fact was of small consequence, but the position of the Society was unpleasant to him, although he still hoped to recruit the phrenological ranks with adherents of more liberal minds than those who had retired. His lectures, too, failed to attract such large audiences as they had formerly. He was not blind to these facts, for he writes:—

"About 14 or 16 tickets are sold for my present course of lectures (1830–31) and a few attend on single tickets. My audience is from 20 to 24. This shows that I gain no ground with the public. I lecture as a moral duty, believing that I benefit my fellow men. If they shall cease to attend, I cannot compel them to come; but as long as even 15 will come to hear me, I shall cheerfully and steadily do my duty. Providence is always on the side of truth; and he who has Providence as his auxiliary has a strong ally, and need not fear the frowns of men."

These symptoms of decreasing interest in the science were, however, counterbalanced by the continued sales of the various phrenological works, indicating that people were reading more on the subject than formerly, and by the frequent

communications which Combe received from many quarters expressing thankfulness for what he had done, and encouraging him to proceed in his work. Replying to a Liverpool gentleman, he said—

“The most grateful reward of my labours is the assurance that they contribute, however little, to the welfare and enjoyment of virtuous and enlightened men; and the handsome manner in which you express your approbation of them increases my gratification. The moral applications of phrenology appear to my own mind to constitute its highest value, and it is pleasing to find competent judges viewing it in the same light. The secretary to a central committee of mechanics’ societies, Mr William Fraser, has just printed a circular to the operatives, recommending the “Constitution of Man” and the *Phrenological Journal* to their notice, as works highly calculated to give them sound practical views of their own nature and duties. Physiological writers, such as Professor Conolly of London, Professor Alison of Edinburgh, Dr MacIntosh of Edinburgh, and Dr Macnish of Glasgow, now admit, in works very recently published, the philosophical nature and probable truth of phrenology. The cause of truth, therefore, continues to advance.”

CHAPTER XI.

1831-1833.—THE PHRENOLOGICAL SOCIETY—ESSAY “ON HUMAN CAPABILITY OF IMPROVEMENT”—WHEN TO PROCLAIM TRUTH—THE CHURCH AND PHRENOLOGY—REV. DR WELSH WITHDRAWS FROM THE SOCIETY—EVANGELICAL RELIGION AND PHRENOLOGY IRRECONCILABLE—ILLNESS OF DR COMBE, AND HIS WORK ON INSANITY—POLITICS—AT CRAIGCROOK—FIRST EDINBURGH ELECTION UNDER THE REFORM BILL—CONSERVATIVES AND REFORMERS—FREEDOM OF OPINION—THE WORKING CLASSES—THE HENDERSON BEQUEST—ARCHBISHOP WHATELY—DEATH OF SPURZHEIM—MISS CECILIA SIDDONS—MARRIAGE.

PHRENOLOGY at its birth was ridiculed, and its adherents laughed at; it progressed, gained strength, and the mockers paused, questioning themselves whether or not there *could* be any truth in this fantastical theory of the brain which its professors presumed to call a science. The phrenologists, in the person of their leader, George Combe, advanced another step, and proclaimed their science the only true science of mind; Combe went beyond the majority of his disciples, and proclaimed phrenology to be the philosophy of Christianity, “the true expositor of God’s will and man’s duty,” and he gave expression to his views and faith in the “Constitution of Man.” At this point one party of his followers wakened in terror to the perception that they were venturing upon untrodden ground, in which they feared there were many quicksands, and they preferred the beaten paths which their fathers had traversed; another party hailed the awakening with delight, and declared that now for the first time they saw a clear course before them, and were enabled to understand the duties they had to perform

here in order best to prepare themselves for the hereafter. The first party withdrew from the apostle of this new doctrine; the second party stood firmly by him. The outsiders were divided too, and whilst the one half refused to regard the subject at all, the other admitted that there might be some truth in the theories so resolutely advocated, and discreetly paused, awaiting their further development. Hence occurred that lull in the public interest in phrenology which compelled Combe in the winter of 1831–1832 to abandon the idea of giving his usual course of lectures.

“The evangelical disciples have abandoned the Society, given up the *Journal*, and denounced me as a dangerous infidel,” he wrote to Mrs Walter Campbell, Islay, on the 22d November 1831, “the consequence of which is that nobody now enters the Society, and nobody would attend my lectures. I do not mean to attempt a course this winter. But all this is local and temporary. Beyond Edinburgh, the science flourishes, and I have no fear, if I live in health, of triumphing over this prejudice in the course of ten or fifteen years, as I have surmounted other prepossessions against me. In point of fact, I feel myself to be animated by a pure love of God and of truth, and to be pleading the cause of religion and of human nature against venerable error and mental bondage, and no external means can deprive me of serenity and enjoyment in pursuing the course before me. My brother’s indisposition is a severe blow, out I shall labour on while strength remains. Andrew was seized in August with pulmonary complaints went to London in September, and thence to Paris; Miss Marion Cox joined him there in October, and both are on their way to Naples for the winter. He is better than he was, but the disease continues. When very ill in Paris he wrote me that, in the prospect of speedy death, he found all his religious opinions, which are identical with mine, abide the test of the prospect before him. Truth, he said, gave calmness and peace to the mind.”

It was the boldness with which he attacked the *forms* of orthodoxy, and also much misapprehension of his meaning, that created alarm. He believed, as the first principles of religion, that God created us; God is all-wise; God is just. He objected to the theological systems which had grown upon these principles, and insisted on his right to object to them. But freedom of speech on such subjects was equivalent to heresy, and the stigma of “free-thinker” once placed upon a man excluded him from most social gatherings; children learned to regard his character as so very wicked that they shuddered at his approach, and shrank from his touch as from that of a “bogie,” although they had no idea of what a “free-thinker” meant beyond the one often false description that he was a man who did not believe in God. It should be borne in mind that the term free-thinker was applied indiscriminately to every one who hinted the least dissent from the Confession of Faith. In this year (1831) Combe wrote for the twenty-ninth number of the *Phrenological Journal* an article “On Human Capability of Improvement,” the theory of which was, that despite the teaching of ministers that man was all bad and incapable of good, he had been endowed with certain faculties by his Maker, which, if properly used, would result in benefit to himself and to his fellows. The following extract will show the scope of the argument:—

“While we do not contend for the absolute perfection of physical creation, or the perfectibility of man by natural means, we are humbly of opinion that there are far more excellencies and capabilities in both than have been hitherto discovered; and that the study, evolution, and proper practical application of the natural elements of the physical and moral worlds are indispensable preliminaries, and most important auxiliaries, to human improvement. It is one of the excellent characteristics of the Christian religion that it is adapted to every state of society—to men scattered in wildernesses or thronged in crowded cities; and hence religion is shorn of her power and utility as a practical system of instruction by whatever tends to widen her separation from science, philosophy,

and the affairs of this world. The human faculties having proceeded from the Creator, are found in harmony with the actual constitution of nature, and would kindle with zeal, and labour with delight in studying, unfolding, and applying it if so directed ; whereas they are restrained, cramped, paralysed, and enfeebled by inculcating habitually maxims which cannot become practical, in consequence of the natural conditions on which they depend not being previously produced. This unfortunate habit of undervaluing the capabilities of the natural world, and neglecting the study of it, diverts the attention of the best minds among the people from the real road to improvement. In consequence of the constitution and moral relations of the natural world being too much neglected,—while, at the same time, the Creator has rendered a knowledge of them indispensable to moral cultivation—preaching is inefficacious in improving the temporal condition of mankind, to an extent unprecedented in most human institutions. This conclusion is forced on us when we compare the number, zeal, and talents of the teachers, the provisions made by law for their support, and the favourable dispositions of the people to profit by their instructions, with the actual benefits communicated by their preaching. When divines shall have become acquainted with the real constitution of the world, and the moral plan which pervades it, and shall have dedicated their talents to teaching these to the people, as preparatory for their other doctrines, they will find themselves and their instructions invested with a moral power and efficacy to which they have hitherto been strangers, and then, but not till then, will religion, science, philosophy, practical business, and recreation appear resting on one basis, animated by accordant spirits, coinciding in their objects, and contributing to one end—the improvement of man as a moral, intellectual, and religious being.”

He applied these remarks exclusively to the temporal effects of religion ; its influence on the external interests of mankind he regarded as “ too sacred a subject for discussion in a journal devoted solely to philosophical inquiries.” But the remarks were too strong at that period even for some of those phrenologists who remained faithful to the cause after the publication of the “ Constitution of Man.” One of those, Mr P. Neill, who read the article in proof, said that he had done so with pain, and warned the writer, as Mr Scott had warned him on a pre-

vious occasion, that such theories would prove fatal to phrenology. The warning elicited the following reply :—

“18th July 1831.—I now return the proofs, revised and modified, and you will oblige me much by reading them and pointing out any further improvements which they admit of, consistently with their general spirit. I assure you that it is my anxious wish to avoid giving offence, and more particularly so to the sincerely pious ; but the observation of life has brought home to my mind a very strong conviction of the great evils under which mankind suffer from ignorance of their own nature and its relations, and of the benefits which phrenology is destined to confer on them when its principles shall be applied, and I felt it a moral duty to proclaim this conviction, and to urge it on society. Dr Andrew Thomson is reported to have said that the proper time for announcing any truth is the first day after it is discovered, and that we may leave all other considerations to God. My own mind responds fully to this sentiment, and I have courage to act upon it ; yet I restrain myself out of deference to many excellent friends who think that truth requires human prudence for its propagation besides its own divine power. I, therefore, announce what appears to me to be truth of greatest value, only piecemeal and at long intervals. But I cannot, under a sense of moral duty, keep it entirely back from the world until they shall be disposed of their own accord to coincide with it. This would never be the case if nobody advanced new and unpopular ideas. You will recollect that the Phrenological Society and *Journal* were both left for years under the guidance of the most orthodox phrenologists, and that there was no attempt made to apply the science to the rectification of any existing opinions or errors, or, in short, to render it more than a subject of mere scientific or literary curiosity. Now, it appears to me to be a stupendous discovery in relation to the moral world, and that it is destined to be the fountain of a thousand blessings. This is not enthusiasm, but sober solemn philosophy,

because phrenology is not a fancy, but an interpretation of the constitution of nature in regard to our animal, moral, and intellectual faculties, and it is *impossible* that such a discovery can fail to be important. Its importance can consist only in rectifying existing error, or in carrying mankind forward to unattained good. Those who see phrenology to be true must, therefore, be prepared for its operating on ancient opinions, and opening up new views. While the *Journal* was confined to elucidating, by means of phrenology, established notions, it dwindled down in its circulation almost to extinction. At the time Mr Scott withdrew, only 240 copies of each number were sold; it must have died instantly if this had continued. It has since risen to about 300 copies in circulation; and I am convinced that, if it is to exist at all, it must be by advancing before the current of common opinion. It is probable that it may perish notwithstanding all our efforts, but I would rather die a martyr to bold truth than perish of timidity to announce it. If our friends in the Church who know phrenology had exhibited the least symptom of applying it in any way, it would have delighted me to leave it in their hands; but with them it is, so far as I learn, barren of all fruit. Those who are attached to the Calvinistic views of religion, so far from encouraging its application to the rectification of opinion, have constantly opposed this use of it; and I am placed in this situation, that if the science is left to them it will remain stationary for an indefinite period, and the *Journal* will undoubtedly perish, while I shall be afflicted with the consciousness of having timidly neglected rendering to mankind the only service which Providence has put it in my power to afford. If I proceed, there is a chance of the *Journal* surviving, and although the popularity of the science may appear to be diminished, yet there will be an immense addition made to its inherent interest, and one man who becomes a convert to it, under the conviction that it deals with the basis of moral, religious, and political institutions,

will be worth a hundred who would take it up as an amusing theory, not applicable to any grave or important purpose. I may add, that the Calvinistic phrenologists have already done the *Journal* and myself all the harm they could, and I am not conscious of having sustained any injury individually from their efforts, but there is no motive left why I should sacrifice duty out of fear of them. I beg pardon for this long letter. I esteem it as a great kindness to be kept right where I am in error, and if you will render the article as inoffensive as possible, without sacrificing truth, I shall regard it as a real act of friendship. You have all along acted at once like a philosopher, a Christian, and a friend, and you have found me, I hope, open to reason. Other phrenologists have gone in the face of everything I proposed in the way of moral application of the science, and so far as they are concerned, I am left without a guide; but the long day will settle all. I lately heard Sir William Hamilton say in company, that he was now satisfied that, 'phrenology, if true, was the most important discovery that ever had been made since man was created.' Would such a conviction have been produced if no views of its applications, such as I have advocated, had been given?"

The essay was published with only a few unimportant alterations; it presented new considerations of interest to the believers in the "Constitution of Man," and it did not excite any particular outcry from the opponents. Three months previous to the appearance of this article the Rev. Dr Welsh, who was at the time president of the Phrenological Society, sent in his resignation of membership. Whilst still adhering to the science, he had found it necessary to oppose the system of morality which Combe based upon it, and at various periods there had been earnest discussions between them. The immediate cause of his withdrawal, however, was the determination of the Society to prohibit the "introduction of all questions in theology which could not be supported by an

appeal to facts in nature, and to logical deductions from them." Combe's reply to Dr Welsh affords an illustration of that plainness of speech which was one of his prominent characteristics in friendship, business, and in his whole conduct.

"12th May 1831.—I duly received your letter of 29th April, a copy of which, so far as it related to the Phrenological Society, I sent to Mr Neill, the secretary, and he told me he had written to you on the subject. I feel an aversion to enter on a discussion of the resolutions of the Society. They were suggested by Sir George S. Mackenzie, prepared by poor Ritchie,* Mr Simpson and Mr Neill (the suggestions of the last having been ultimately adopted by the first and second), and approved of by a large majority of the members, and I am disposed to allow them to rest. I do not in the least object to your resigning on account of them, and I have no inclination to enter into any discussion with you respecting their merits or demerits. I do not mean to say anything disrespectful, but I consider all clergymen of Established Churches as placed out of the pale of reason in regard to the philosophy of man. They have sworn to maintain certain views regarding the history, actual condition, and future prospects of man, and they cannot admit or countenance any ideas in opposition to these, although demonstrated by irrefragable evidence, without being liable to a charge of dishonesty and disloyalty to the Church. I have no doubt that your belief in the doctrines of the Church is not only sincere, but appears to your own mind to be so thoroughly warranted by the best evidence, that no other truth *can* be opposed to it. Viewing this as your state of mind, I continue to love and respect you, and see you as at once pure and independent in your own internal feelings and perceptions; but, at the same time, I cannot shut my eyes to the influence of your situation on your perceptions. I consider it becoming not to urge a discussion on you which you cannot meet on fair terms. I acquiesce in your resignation if you

* Mr William Ritchie died 4th February, 1831.

consider the resolution of the Society at variance with the standards of the Church ; but I retain the privilege of thinking that the resolutions are not opposed to religion or morality, and therefore quite suitable for laymen who have not sworn allegiance to Calvin and the Divine Assembly at Westminster. Your resignation will do the Society the less harm that the secession of the evangelical members has already done it all the ill it can sustain. It has been in extreme languor last winter, and will probably expire next year at any rate. The session had closed before your letter was written, and it will be November before your resignation can be communicated. It will be proper for you to write a letter to the secretary to be read to the Society.

“ You have often spoken of writing an essay to show the accordance of phrenology with evangelical religion, and it is really a dereliction of duty in you not to do so ; they appear to me to be at variance, and it would give me great pleasure to see that I am in error. It would add to my usefulness also, for I refrain from stating many views that appear to myself true and useful out of deference to evangelical opinions, although my conscience often upbraids me for doing so. My hands are restrained by my friends much more than by my own inclinations. I fear that when I come to die the forbearance which I practise on this subject will lie heavy on my conscience. However, time is doing its duty. If the Reform Bill were passed, opinion would become more free, and truth might then be stated with less offence than now. You can scarcely see so deeply into the state of opinion as I am enabled to do, my situation being so much more free. It appears pretty clear that a revolution in doctrine will take place much sooner than I once anticipated. The present creed is daily and hourly losing ground ; there is a silent sapping of its foundations, and a wide-spreading perception of its deficiencies, that render its existence as insecure as that of Napoleon’s power after the Russian campaign, or as that of

the present constitution of the House of Commons just before the Reform Bill appeared. Opinion is going away from it. It will appear to you, probably, as standing in all its strength and beauty up to the hour when some accident shall call forth the opinions now latent, and then it will totter as if smitten by a whirlwind. It may appear to you that this is merely taking Hope for Causality on my part, but I hear and see much on this subject that does not reach your ears and eyes. If you can reconcile phrenology to the Confession of Faith, you will reconcile nature and philosophy to it, and by so doing you will place it upon a pedestal of enduring strength, and avert the results which I have here alluded to. If you will bestir yourself I shall furnish the objections and difficulties, and yours shall be all the merit of the solution of them. . . . As to personal friendship, if you are not offended at the freedom of my opinions, I am very far from being so at your acting on your own conviction of what is right. Let us, therefore, live as friends on earth, however widely we may differ in our notions of the way to heaven."

In his domestic circle at this time Combe was suffering much anxiety. His sister Jean, who had been his pupil and assistant when he first took up the cause of phrenology, died on the 31st January; and Mr William Ritchie, a cherished friend, and his defender in more than one instance against public prejudice, died on 4th February. Of him Combe wrote—"Mr Ritchie will be a public loss, for through the *Scotsman* he did great good to his country." The state of Dr Combe's health was also a source of distress. For about nine years the Doctor had been enabled, by careful obedience to the natural laws, to practise his profession with success. But, as has been already mentioned, symptoms of pulmonary disease were manifested in the autumn of 1831, and he proceeded to Naples for the winter. He had just completed and published his first work, entitled "Observations on Mental Derangement, being an Application of the Principles of Phrenology to the

Elucidation of the Causes, Symptoms, Nature, and Treatment of Insanity." The book had grown out of an essay originally intended for the *Edinburgh Review*, but the editor of that periodical, Mr Macvey Napier, would not admit the subject if treated on phrenological principles; and as the Doctor found it impossible to write the essay without explaining the principles by which he was guided, he happily determined to produce a separate work.*

* "In connection with this subject it may be mentioned, that in June 1830, George Combe wrote to Mr Macvey Napier, who had then recently been selected to edit a new edition of the 'Encyclopædia Britannica,' asking him whether Dr Combe might be permitted to contribute the articles 'Insanity' and 'Phrenology' to that work. This question was based on the assurance given to the public in the prospectus, that the ablest writers in each department should be solicited to undertake the several treatises on literature and science for the 'Encyclopædia.'

"Mr Napier returned a polite answer, mentioning that he was not ill-pleased that Dr Combe had not offered him the article on Insanity for the *Edinburgh Review*, because he had a strong conviction that Dr Combe could not do justice to his particular views without taking aid from phrenology, and that he (Mr Napier) would have been placed in the truly disagreeable situation of 'rejecting on that account' an article otherwise able. This objection applied also to his writing on Insanity for the 'Encyclopædia.' Mr Napier added, that he did not mean to notice the other subject in any *distinct* form till he should reach the head *Phrenology*, which was yet distant; that he would then commit it to the ablest and most distinguished writer whom he could prevail upon to undertake the discussion of it, 'suitably with the views I may *then* entertain;' that if there was no change in his views, he should certainly *not* apply to any *professed phrenologist*; and that he did not think he should consult the interests of truth or science—the only interests he should take into account—if he did, any more than he should think he consulted those interests, if he should 'take an article on *Animal Magnetism* from a doctor in that school.' The article on Phrenology was accordingly committed to Dr P. M. Roget, an opponent of the doctrine.

"A principle is involved in this incident which is deserving of serious consideration. Nothing could be more becoming than Mr Napier's using his editorial control over the 'Encyclopædia,' to advance the interests of truth and science; and the candid and courteous manner in which he rejected Dr Combe's proffered contributions deserve all commendation; but the real import of his letter is, that he did not consider Dr Combe a fit person to be entrusted with the subjects in question, *because he was a phrenologist*. We have seen what means Dr Combe had adopted to ascertain the merits of phrenology, and it is no disparagement to Mr Napier to affirm that he had not made it an object of serious investigation. We ask, then, is it proper that the editor of an Encyclopædia, who professes to give an *accurate* and *honest* representation of all sciences, creeds, doctrines, and opinions, invested with sufficient interest

The reports of its progress in the estimation of the public, and especially in that of the medical profession, reached him at a time when he believed his life's work was finished, and cheered him with the thought that he had been permitted to accomplish something in the service of humanity. George watched the fate of the book with affectionate interest, and was as anxious to ensure its success as he was to ensure that of the third edition of the "System," which appeared almost simultaneously. The latter sold well from the first, and a second edition of the Doctor's book was speedily called for. This afforded much consolation to the brothers in the crisis through which they were passing. How seriously he regarded the condition of his brother appears in a letter addressed to Dr Welsh on 19th September 1831. "I regret extremely to inform you that, to all human appearance, we are going to lose the Doctor. . . . He calmly enumerates in his letter from Paris symptoms which I have heard him say in his patients' cases were decisive of a fatal termination, and he cheerfully and meekly announces his intention of doing what he can to avoid this result, and of submitting with resignation if the means shall prove unsuccessful. I need not express what I feel on this most melancholy prospect. His past life leaves nothing to regret as to its employment." After giving some general information of the progress of phrenology, he adds, "We have recently obtained the accounts of the *Journal* for the year from

to merit public notice, should erect his individual 'views' concerning a much controverted subject, which he does not pretend to have studied, into a standard by which it is to be tried, and into conformity with which the representation of it must be moulded? If the editor happen to be a Roman Catholic, must the article 'Protestantism' be written by a Roman Catholic, to adapt it to *his* views of truth? Or if he be a Protestant, is it fair or instructive to his readers to employ a Protestant doctor to represent the adverse faith of the Roman Catholic? Would not the 'interests of truth and science' be better served if the editors of such works employed the ablest man in each department to write upon his own subject?—warning his readers that this was the rule, and that the editor had used his power of control only to the extent of excluding all topics inconsistent with public decency and morality."—*Life of Andrew Combe*, page 191.

30th June 1830 to 30th June 1831, and the sales this year are the first that have cleared the expenses [that is, of paper and printing: nothing was paid for editing or contributions]. We shall have nearly 30s. over to meet the deficiencies accumulated in eight years! We were in high spirits as to the future, but Andrew's fate deranges all. I do not at present see how we shall do without him, but firmly believe that the cause does not depend either on him or me, or any individual."

To the Doctor himself he wrote on 14th October 1831—

"Your first letter from Paris conveyed to my mind everything that your letter to Dr Scott does.* While we were all well we have said, sometimes gravely and sometimes gaily, in all moods and in all seasons, that death is not the heaviest of human calamities; and this is the time to ascertain whether the opinion is well founded. I repeat that the past is one unbroken scene of pleasure, so far as regards your conduct, your usefulness, your affections, your intelligence. There is not a speck on the picture,—not a shadow to darken the soft brilliancy of goodness which shines out from it. That you should be called on to quit life without accomplishing all that you could desire, and that your friends could wish, is a matter of regret; but you have done diligently and well all that Providence rendered it possible for you to do, and the amount has not been small. Your book is a treasure for which your country will honour your memory. You had no prospect of reaping the reward, although you had been permitted to live till three score and ten, so that parting now makes little difference. To your friends and to me the deprivation will be great. You have been half of my intellect and more than half of my affections, and I feel that without you I would not be a quarter of what I have been. But I look at the result with calmness and resignation. Before this day twelve months I may be as you now are—but I cannot pursue this. You know all that I feel and all that I would say. Let

* Dr Scott was attending to Dr Combe's patients during his absence.

us find resources in God, and in his laws, of which our philosophy is a transcript."

The philosophical condition of mind into which the brothers had educated themselves is almost painfully revealed in the deliberation with which the Doctor's worldly affairs were arranged between them in view of the anticipated end. George submitted to him a detailed account of his expenses, including the charge for his board, with the explanation in regard to this item:—"If you live, you and I will not differ about money; if not, the charge is just, because this house and the establishment is calculated as much for you as for me." The Doctor, however, recovered, and from 1832 to 1841 continued to improve in health, to the amazement of his medical friends, for his condition had been one which seemed to preclude the possibility of recovery. But he had given implicit obedience to those laws of health which he afterwards expounded with so much benefit to the world in his "Principles of Physiology applied to the Preservation of Health," and he reaped the reward. He returned to Edinburgh in 1832, and although unable to resume general practice, he became, by and by, sufficiently strong to undertake the duties of a consulting physician.

During the Doctor's absence Combe lost another friend,—his cousin, Miss Isabella Newton. She had passed through the various stages of consumption, lingering for months on the verge of the grave. The brothers took an affectionate interest in her; the Doctor visited her two or three times a day, even when his own health was in a precarious state; George saw her twice a week, and endeavoured to brighten her last sad days by his conversation and kindly attentions. Although their relationship and her delicate health put all thought of marriage out of the question, he regarded her with more tenderness than had yet been inspired by any other woman. This was understood between them, and they conversed with the freedom of brother and sister, without misunderstanding as to

their position towards each other. His presence cheered her, and he felt that she exercised a beneficial influence on his nature. She died in December 1831, and Combe wrote to the Doctor—"I shall miss her much as an object of affection; for you may tell the Editor that the tuning of my faculties by Isy's sweetness and goodness once or twice a week was the great cause, so far as I know, of that 'humanity' which she remarked as having almost taken root in me, and that unless the impression has been made deep enough to last, there may be some danger of my again becoming a barbarian now that she is removed. However, it is so very agreeable to be 'human' that I shall do all I can not to relapse; and Rob promises to help me."

The "Editor" was the playful cognomen given to his niece, Miss Marion Cox, who became the manager of the brothers' household when Miss Jean Combe retired on account of ill-health, and who remained the faithful companion and nurse of the Doctor throughout his life. As there were many inquiries for the Editor of the *Phrenological Journal*, and as neither George nor Andrew would accept the title, it was in family banter conferred on their niece. The "Rob" referred to in the foregoing extract was another niece, Miss Robina Cox (now Mrs Ivory, St Roque, Edinburgh), who took Marion's place as housekeeper during her absence with the Doctor.

His letters at this period contain repeated references to the Reform Bill, in which he was, like all intelligent men, greatly interested. He had acted for some time as the secretary of the Edinburgh Reform Committee, but he was at length compelled to resign the post, finding the tax upon his time too great. He continued to take the same interest in the progress of the Bill, however, and was much distressed by the defeat of the Ministers. He regarded the proposed measure as one important step in the intellectual progress of humanity. Referring to this subject, he wrote to a friend in 1831—

“I am sometimes amused at my own condition of mind. During the greater part of each day I act and think in my professional character, like a man not only of the present age but of the kingdom of Scotland as it exists at this moment, and those who have daily intercourse with me do not discover that any conceptions beyond those occupy my attention. Escaped from business and gratified with the society of a congenial friend or two, such as Lawrence Macdonald, the sculptor, and Charles Maclaren, the editor of the *Scotsman*, I revel in a new world. The opinions, institutions, manners, and pursuits of the great mass of mankind appear to me semi-barbarous, and deplorably inimical to their own welfare; I trace out the causes of their sufferings, contemplate the high capabilities of their nature, anticipate the dawn of a rational condition of society, and live with purer, and wiser, and happier men. . . . I am by no means sanguine of direct and immediate advantage from parliamentary reform. Men in general are not yet sufficiently alive to moral objects to devote the political power which Reform will place in their hands to the improvement of their fellow-men. But they will come to do so; contention and disappointment will weary out their prejudices, and reason will insinuate itself insensibly.”

One of the results of his activity in the cause of parliamentary reform was his personal acquaintance with his old enemy Jeffrey. “Days are changed between the Lord Advocate and me now,” he wrote to Miss Graham of Duntrune, 11th September 1832. “I go to Craigerook to-day to dine with him! That is to say, I am invited along with others who have acted as the committee for forwarding his election. On the 22d December of the same year he was able to describe the election in writing to his brother William in America.

“The election of Mr Jeffrey, the Lord Advocate, and of Mr Abercrombie, son of Sir Ralph Abercrombie who fell in Egypt, was completed yesterday, under the Reform Bill. The Tories

have been defeated by a large majority. I acted as one of the committee of the Reform candidates, and was on the hustings yesterday when the sheriff announced the return. The trades attended with splendid banners, thirty or forty in number, and with bands of music. The chairs were mounted on a platform raised on four wheels and drawn by four horses, and they were tastefully ornamented with buff and blue ribbons and tassels. The procession started from the Cross, went down the High Street, along the North Bridge and Princes Street to Moray Place. In the High Street the windows were crowded with spectators, loud cheers rent the air, the banners waved, and handkerchiefs were floating from every window. That street had often witnessed military pageants of equal splendour, in which brave men marched to the sound of martial music, colours waved, and hearts beat high; but these were the minions of despotism, the tools by which the people were to be shorn, and the beings themselves who trod the way so proudly, were destined too soon to die miserably on the battle-field, or perish under the fatigues and privations of war. The splendid banners and soft music of the trades, leading home their first chosen representatives in the national council, was a triumph of a far higher description. The people have become their own legislators."

The political and social reforms which Combe advocated have been in a large measure accomplished, and others are tending towards accomplishment. He was a true Reformer, and sought the solution of the problem which was disturbing the country and its statesmen by the elevation of the lower classes by the means of education. The public mind in 1832 was not prepared for the liberty of thought in religion and politics which he advocated, and in private circles his followers had to endure many inconveniences. One correspondent, Mrs Kemmis, Dublin, had told him of the difficulties she encountered in association with her friends on account of her opinions, and he replied—

"One of the first duties incumbent on those who entertain liberal sentiments, either in politics or religion, is great forbearance towards those persons who differ from them. The very essence of liberty is that all shall have the privilege of thinking as their conscience dictates, while they abstain from injuring their neighbours. Reformers above all others are bound to

grant this indulgence; for why should not the Tory be allowed to love old institutions and corrupt Parliaments, if such be his taste, without suffering personal obloquy or discourtesy? I live next door and in habits of the greatest intimacy with a Tory lawyer and sheriff, whose political sentiments and mine are the antipodes of each other, and yet we are excellent friends. I have once or twice required to intercede with liberals in religion for toleration to evangelical relatives, who were under their power. I contrive to live in terms of sincere friendship with some high Calvinists, and even one or two followers of Edward Irving. That you should hold your own sentiments firmly amidst a host of relatives opposed to them at every point, and live with them in terms of affection and mutual esteem, is the best proof that your principles are thoroughly moral, and that your mind is in harmony with its professions. I regret very much to learn you have had so much sickness in your family circle. The duties of our private station, in my estimate, take the first place; and we are entitled to be philosophers only after performing all that we owe to those whom Providence has cast on our care. It is not selfish to tend the sick under our own roofs before attempting to amend the public health in any of its departments. Converse with the sick affords an admirable exercise for the moral sentiments, and softens the whole mind. I have fallen into the way of inquiring after, and calling for invalid friends, who can benefit by sympathy, and find that it affords me more pleasure than I could have conceived before I learnt the habit.

“I am daily led to believe that sound ideas are spreading even faster than any individual has exact means of knowing. Sometimes they break forth even from the pulpit. Last Sunday I heard Dr Chalmers preach a most eloquent sermon on the text in Psalm xix. 5-11, that there is a great reward in *keeping* the statutes of the Lord, in which he demonstrated that the very act of obeying the laws of God is its own recompense. He boldly said that heaven is just holiness of mind, and not a place where enjoyment of other kinds is to be paid as the wages of holiness. The man who is in love with his duty is the true Christian; he who is in love only with the wages to be paid for performing it, has no title to the character. The latter would not enjoy heaven while in this frame of mind, although placed within its locality. This is exactly the doctrine of the supremacy of the moral sentiments taught in the “Constitution of Man.”

“As you so kindly take an interest in diffusing the views contained in my writings, you will be pleased to learn that a

young Frenchman, whom my brother met in a ship sailing between Marseilles and Naples, is busy translating the "Constitution of Man" into French. The book continues steadily but slowly to sell. About 100 to 120 copies are bought every year. If Archbishop Whately or Lord Brougham could be prevailed on to read it and recommend it, ten times more would sell; but the Reviews have left it almost entirely unnoticed.

"Your opinion that the higher classes will not lose by an advancing civilization, although stripped ultimately of their artificial distinctions, coincides entirely with my own views. They have lost nothing by laying aside their wigs, laced coats, buckles, swords, and ruffles. Men of the lower ranks dress as well as the aristocrats, but the general polish of manners secures to the modern lady and gentleman greater delicacy and higher deference of deportment from every one whom they meet with in society, than these antiquated habiliments afforded to their ancestors. In like manner a practical knowledge of the real qualities which adorn and render happy a rational being, will lead the noble families in a few generations to feel ashamed of their titles, and of the barbarous and immoral events from which most of them originated. In short, man has everything to gain by an increase of knowledge, nothing valuable to lose, and the aristocrats are just men. You will have received No. 31 of the *Journal* by the time that this reaches you. The article on the Cholera has gratified the philosophers, and 'horrified'—for this is the word used—the evangelical in this city who have read it."

In connection with this subject of the elevation of the working classes, Combe gave a great deal of attention to the effect of labour on the mind. The result of his observations was the conviction that the long hours during which men were compelled to labour throughout the week left them no opportunity for the cultivation of their moral sentiments; and the narrow spirit which regulated the Sunday exercises deprived that day of rest of much of the value which it would possess under a different system. He was, therefore, not only in favour of prohibiting ordinary work on Sunday, but strongly advocated a reduction of the hours of labour on week days. He conceived that God had allowed man to invent machinery that he might obtain leisure for

moral cultivation ; and that our social miseries had arisen to a great extent from our having shut our eyes to this benevolent design, whilst we devoted all the power derived from mechanical contrivance to the mere object of gain. His doctrine was that part of every day and *all* Sunday should be dedicated to moral pursuits.

“ Every day,” he said, “ natural knowledge should be taught to the people, and the wisdom, might, and goodness of God unfolded out of it all. On Sunday, the people should have *exercise* for their bones, muscles, and blood-vessels, in pursuits calculated to strengthen them and give them a healthy tone, so as to fit them for mental exertion. This is moral preparation. They should then have their intellectual faculties excited by instruction in God’s words, and by an exposition of the duties which are dictated by the very constitution of nature, and of their own minds ; and, finally, they should thereafter engage in proper religious worship, to do which with effect they would be prepared by the previous training on week days and on Sundays of all their physical and rational powers. I think that if this were done, the social arrangements of society would be improved, and Christianity might at length become practical. . . . Bodily exercise or recreation on Sunday is by our physical condition essentially necessary to activity of mind, and yet it is generally regarded as sinful. Man appears to me to be walking in this world as in a labyrinth, fearing God but not loving him. And I humbly think that the intricacies will never be unravelled until man shall see that one leading object of life ought to be the study of the Creator in his works, and yielding obedience to all his laws, whether written with his finger in creation, or by his spirit in the volume of Revelation.”

One of Combe’s early ideas had been the institution of courses of evening lectures on science and philosophy for the benefit of the industrial classes. Moderate fees were to be charged, and the hours so arranged as to be convenient for those who were working in shops and factories. The first attempt he made to carry out this idea was in offering to deliver a course of lectures to the students of the Edinburgh School of Arts ; but the directors politely declined the proposal. In April 1832 he, by request, gave six lectures on

Insanity to the students attending the class of Dr Macintosh, a teacher of the Theory and practice of Medicine in Edinburgh. Two hundred students, and between thirty and forty gentlemen not connected with the class, attended. In the following month Combe, in compliance with a requisition from a large number of mechanics, shopkeepers, and clerks, delivered a course of lectures on the evenings of Mondays and Thursdays, commencing 7th May and terminating on 26th July. He had an attendance of over two hundred people, and eighty-four of these availed themselves of the permission granted by the Phrenological Society to examine the casts and skulls in their Museum. The languour into which phrenology had apparently fallen during the winter of 1831-32 was dispelled, and great enthusiasm for the science was displayed by the audiences in the Clyde Street Hall. They expressed very cordial gratitude to Combe for the powerful manner in which he had illustrated the "Wisdom and goodness of the Creator." The immediate effect of these lectures was the formation of an association for the arrangement of annual courses of evening lectures for the working classes on chemistry, natural history, and phrenology, combined with physiology; afterwards botany, astronomy, and moral philosophy were included in the subjects of study. Thus one of Combe's cherished ideas was realised in the manner which was most satisfactory to him,—namely, by the spontaneous action of the people themselves. It was at this first series of lectures to mechanics that the trustees of the Henderson Bequest began to take active steps in fulfilment of their trust by supplying the students with 200 copies of the "Constitution of Man" at 1s. 6d. a copy. The selling price of the work was at that time 6s.; Combe and the publisher jointly sacrificed 45 per cent. of the price, so that the trustees contributed out of their fund 1s. 8d. a copy to reduce the cost of the book to the students.

The particulars of the Henderson Bequest are of importance in the history of phrenology and in the life of George Combe,

and it is therefore desirable to give here all the details essential to a clear understanding of its nature and purposes.

William Ramsay Henderson was born in Gayfield Place, Edinburgh, 1801. He was the only son of an Edinburgh banker, Mr Alexander Henderson of Eildon Hall and Warriston. Whilst the father was engrossed in business, the son was permitted to travel on the Continent, and to cultivate his tastes for painting and poetry. He attained some skill as an amateur landscape painter, and found his chief pleasures in literature. He had an aversion to business, and this fact combined with other circumstances induced Mr Henderson senior to convey his property to the care of trustees, with instructions to allow his son £500 per annum during his life, with the use of the mansion house and pleasure grounds of Eildon, and to settle that estate on his son's children if he should marry and leave offspring. In the event of his son dying without issue, he allowed him to dispose by testament of £5000, and directed his trustees to pay that sum as his son might instruct them. Mr Alexander Henderson died in July 1828.

Phrenology was one of the subjects in which Mr W. R. Henderson took a deep interest; he studied it earnestly, and had thought of devoting himself to its propagation by means of lectures. His interest in the science will be best explained by the following extract from the opening address written by Dr Andrew Combe for the students of the Andersonian University, Glasgow, 1864, (but owing to the Doctor's ill health, read by George Combe) on the foundation there of a chair of Phrenology:—

“The late W. R. Henderson devoted much time and attention to its study, and became deeply impressed with the services it was destined to render to mankind. In his own person, and under many drawbacks, he had, both during health and in disease, experienced its practical utility, and thence became more fully aware of the numerous and beneficent applications of which it admits, to the relief of suffering, as well as to the moral improvement of man. Under this conviction, he resolved to do all in his power for its more extensive diffusion. With

this view, some years before his death, he devoted part of his leisure to the delivery of lectures on the subject to the working classes in Leith. An impediment in his utterance rendered this effort less successful than it would otherwise have been; but to secure the more effectual and permanent attainment of his object, he made a will by which, after providing annuities for several friends, he bequeathed all his property to trustees, to be devoted to the more extensive diffusion and cultivation of phrenology. He lived for four years after making this will, and his conviction that he had done wisely in dedicating his funds to such a purpose became only the firmer."

The will referred to in the foregoing extract was executed on the 27th May 1829. By this deed Mr Henderson conveyed to trustees such funds as he might be possessed of at the date of his death, and the £5000 placed by his father's trust deed at his disposal in the event of his dying without leaving children. After providing for the payment of certain legacies and annuities, he gave the following instructions regarding the application of the residue of his funds:—

"And lastly, the whole residue of my means and estate shall, after answering the purposes above written, be applied by my said trustees in whatever manner they may judge best for the advancement and diffusion of the science of phrenology, and the practical application thereof in particular; giving hereby, and committing to my said trustees, the most full and unlimited power to manage and dispose of the said residue in whatever manner shall appear to them best suited to promote the ends in view: Declaring that if I had less confidence in my trustees I would make it imperative on them to print and publish one or more editions of an 'Essay on the Constitution of Man, considered in Relation to External Objects, by George Combe,'—in a cheap form, so as to be easily purchased by the more intelligent individuals of the poorer classes and Mechanics' Institutions, &c.; but that I consider it better only to request their particular attention to this suggestion, and to leave them quite at liberty to act as circumstances may seem to them to render expedient; seeing that the state of the country, and things impossible to foresee, may make what would be of unquestionable advantage now not advisable at some future period of time. But if my decease shall happen before any material change affecting this subject, I request them to act agreeably to my suggestion. And I think it

proper here to declare, that I dispose of the residue of my property in the above manner, not from my being carried away by a transient fit of enthusiasm, but from a deliberate, calm, and deep-rooted conviction that nothing whatever hitherto known can operate so powerfully to the improvement and happiness of mankind, as the knowledge and practical adoption of the principles disclosed by phrenology, and particularly of those which are developed in the 'Essay on the Constitution of Man,' above mentioned."

Mr Henderson died on the 29th May 1832, without having married, and his settlement, dated four years previously, came into operation. The original trustees were Mr W. L'Amy and Dr Andrew Combe, who were bound to nominate, "by a writing under their hands, two or more persons who shall be in their estimation enlightened phrenologists, and free from all religious bigotry or narrow-minded intolerance, as successors to his (Mr Henderson's) said trustees in the application of the said residuary funds." They were also empowered to "assume one or more such persons as co-trustees" for the management of the fund and the attainment of its objects. Combe at once forwarded a copy of the will and a statement of the facts of the case to Sir James Gibson Craig, an eminent lawyer and well known citizen of Edinburgh. His object in doing so was to satisfy himself that it was right to permit the will to take effect, and also to prevent any cavilling on the part of outsiders. Personal legacies to a small amount had been left to George and Andrew Combe—to the latter partly in acknowledgment of his professional attendance, for which he had hitherto received no remuneration.

EDINBURGH, 30th *May*, 1832.

"MY DEAR SIR,—I trouble you at present with Mr W. R. Henderson's settlement, and solicit your perusal of it and private advice for the guidance of my brother and myself in regard to the sums which he has seen proper to leave to us. I mean that if you, as a friend, consider them legacies liable to misinterpretation, or see any ground of propriety or delicacy for our renouncing them, I shall announce our resolution to do so at the moment when the

settlement is produced. To enable you to judge correctly, I inclose Mr Henderson's manuscript instructions, which be so good as read first, and then peruse his settlement. The deed was drawn up by and executed in presence of my friend Mr Robert Ainslie, junior, and the evidence is complete of the whole of the provisions being his, Mr Henderson's, deliberate acts at a time when his mind was strong and vigorous. The codicil in favour of my brother, executed in January last, was intended by Mr Henderson as an acknowledgment of my brother's attention to him until his own health gave way.

"I anticipate an opinion on the part of his friends that the dedication of the residue of his property to the advancement of phrenology is very absurd, and also that they may consider this as the consequence of my influence over him. The justice of that opinion will depend entirely on the decision of the previous question, whether phrenology be useful, as Mr Henderson believed, or useless as they suppose; and he clearly was entitled to follow the dictates of his own judgment on that point.

"I do not feel any anxiety, therefore, regarding the views which may be entertained respecting that part of his settlement. The evidence is complete that he acted on his own deliberate conviction, and the world must decide whether the purpose was wise or foolish. I have no personal interest in the application of the residue; and hope to give a just account of the stewardship hereafter. I used no influence with him in respect to the settlement of any part of his means.

"Your avocations are so numerous that you may be well excused from devoting time or attention to the merits of phrenology; but as I set a high value upon your opinion, which I know to be candid and independent, I use the freedom to mention a few facts tending to show that Mr Henderson partook of error along with high authority, if he was wrong in regard to the work which he desires to be printed for distribution among the operative classes, viz., my book on the 'Constitution of Man.'"

After first referring to the testimony of Dr Channing, quoted on page 222, he proceeds:—

"2dly. The archbishop of Dublin, after reading it and some numbers of the *Phrenological Journal*, ordered the *Journal* from the beginning, and desired his name to be entered as a subscriber. In a letter from His Grace, dated 19th May 1832, addressed to me, he says, 'I wish to assure you that I have

never entertained the vulgar prejudices against phrenology. I have not been able to devote myself sufficiently to physiological inquiries to ascertain the truth or falsity of its doctrines respecting the brain; but I have long been in the habit of saying that the metaphysical principles of the phrenologists afford the best nomenclature at least that I know. I think there has been much unsound reasoning on both sides; none worse (though very specious) than that in the article in the *Edinburgh Review*, which you or your namesake and relative so completely demolished. As a reply I never saw anything more triumphant.' His Grace along with this letter sent me two of his own works as a present, one of them on account of the remarkable coincidence between some of my writings in the *Journal* and it. You will perceive that personally I am unknown to him. The article he alludes to was the Lord Advocate's."

"3dly. Yesterday I received a letter, dated Paris, 19th May 1832, from a Monsieur Dumont, also a stranger, intimating that a translation of 'The Constitution of Man' into French is complete, and will be published in winter when the town recovers from the panic of cholera. He says that the *Revue Encyclopedique* of that city will in future advocate seriously the views of that work. He adds 'It is to you that I owe the advantage of being able to follow a useful path in my endeavours to benefit mankind, which was entirely unknown to me before I read your work.' He is the translator, and is assisted by some Parisian advocates.

"4thly. Two printed sermons by J. M. M'Culloch, A.M., minister of St Vigean's chapel of ease, Arbroath, were handed into my house two days ago, and on page 38 I find the following note: 'This illustration, as well as some of the remarks under this head of discourse, has been suggested by the reasonings of Mr Combe in his strikingly original and convincing work on the Constitution of Man,—a work which, had it only recognised man's incapacity as a fallen being perfectly to observe the laws of creation, would have deserved to stand at the head of the useful books which this age has produced.' I have no acquaintanceship whatever with the reverend gentleman who published these remarks.

"Excuse me for troubling you with these observations. Mr Henderson formed his judgment in 1829, and these testimonies have since appeared in support of his discrimination. Perhaps the long day may fully justify his selection; but in the meantime I am hopeful you will favour me with your suggestions as to the line of action which I ought to adopt. To have

requested Mr Henderson to omit my brother or myself in his settlement would have been viewed by him as an insult, and put an end to our whole means of doing him any service ; and I contemplated being guided by circumstances if I survived him whether to accept of his bequest or not. My brother is still in Italy, but I have no doubt he will yield at once to your opinion. So determined was Mr Henderson to have the settlement as framed even in its expressions according to his own mind, that when Mr Ainslie, to avoid remark, omitted the word "religious" before bigotry in extending it, he noticed the omission and insisted on having the word restored on the margin, where it remains. His property consists of the house in Pilrig Street and £1500, the remnant of the £3000, besides the £5000 of his father's funds. Be so good as return the inclosed before Saturday. I shall then send you a copy officially."

On the same day Sir J. G. Craig, replied—

"MY DEAR SIR,—I return all the papers you have been so good as send me. The letters you have sent me are, of themselves, sufficient to convince any one of Mr Henderson's determined purpose to execute the settlement he has made. Of his sentiments I had no doubt before I saw these letters, and therefore I should have been surprised if he had acted other-ways than as he has done, except in this, that having the very strong attachment he had to you and your brother, I am much surprised at the smallness of the legacies he has left you. As to your giving them up, I am quite sure that no one can for a moment imagine that there can be the smallest reason for your doing so. For my part I should have thought his whole fortune most wisely disposed of, had it been left to you. To the *general* point, stated in your letter, I have given little consideration, having so many other things to attend to, and having little time for such disquisitions. Your zealous advocacy of it, and my very high respect for the soundness of your judgment, your integrity, and your talents, must always have a strong effect in inclining me to think favourably of the science. Most truly yours,

"J. G. CRAIG."

The trustees nominated in Mr Henderson's deed of settlement were : James L'Amey of Dunkenny, advocate ; George Combe ; and Andrew Combe, M.D. These gentlemen by a deed of assumption, in terms of the will, appointed in August 1832, James Simpson, advocate, and William Waddel, W.S.,

as co-trustees. Throughout the whole conduct of the trust, Combe, feeling that the matter affected himself closely, was as scrupulous in the application of the funds as if he had been guarding them for a client whose interests were opposed to his own. The following statement, prepared for the trustees at Combe's request, early in 1841, will show to what extent the fund was applied to the advantage of phrenology:—

“On 15th April 1836 the trust affairs and accounts were examined by a professional accountant in Edinburgh, who reported the residue of the funds, after deducting the specific legacies left by Mr Henderson and the expenses of administration, to be £5645, 0s. 9d. This residue is subject to annuities payable to a gentleman, two ladies, and the family of an old servant, amounting in all to £135 per annum. The sum applicable to phrenology consists of the surplus of the income of the trust estate, after deducting the annuities and the expenses of management. The aggregate amount of it from the commencement of the trust to the 31st December 1840 was £663, 9s. 7d.

“The sums paid by the trustees for phrenological purposes have been the following:—

“1. For reducing the price of the ‘Constitution of Man,’ including payments to printers, engravers, publisher, and the author of the work,* £359, 15s. 2½d.

* The payment to the author consisted only of part compensation for the reduction he made in the price of the more expensive editions of his work, the details are given here. The sales of the “Constitution of Man” have been as follows:—

	Copies.
1828, June —First edition, 12mo, published at 6s., boards, . . .	1500
Henderson's Trustees reduced the price of 200 copies of this edition to 1s. 6d., and of 81 copies to 2s. 6d.	
1835, March—Second edition, enlarged, fine paper, 7s. 6d. . . .	1000
The price of this was reduced to 4s.	
The Henderson edition, 6s.	2000
The price of this was reduced to 2s. 6d.	
Aug. —Third edition, stereotyped 6s.	1000
The price was reduced to 4s.	
Nov. —Second impression of do. 6s., reduced to 4s.	1000
1836, March—Third edition of do. 6s., reduced to 4s.	1500
Oct. —Fourth do. of do. 6s. reduced to 4s.	3000
Total 12mo,	11,000

"2. For supporting the *Phrenological Journal*, five quarterly payments of £10 each, commencing 16th October 1832 and ending 1st September 1833—£50. After this date the proprietors of the *Journal* reported that it defrayed its own expenses, and declined accepting farther assistance."

For the general purposes of phrenology the sum of £56, 16s. 9½d. was expended; this included the cost of printing and circulating a pamphlet of testimonials in favour of the use of phrenology as a guide for the proper distribution of convicts in the colonies, collected by Sir G. S. Mackenzie in 1836, and presented to Lord Glenelg. The total amount of the Henderson bequest funds used for the advancement of the science from 1832 to 1840 was £466, 12s., leaving a balance of the amount applicable to the purpose of £196 17s. 7d. The extensive circulation of the "Constitution of Man" at various prices rendered any application to the trust unnecessary after 1835. Besides the editions already enumerated, six editions of the work were published in the United States, and it was translated into French, German, and Swedish. Most gratifying to Combe was the demand for a school version of the book, which was prepared with care and adopted as a text-book in several schools. To every edition Combe gave earnest attention in revising and amending, for, as he wrote to a friend, "That work is my pet and delight, and I am most anxious to improve it." Whenever the pro-

The People's Edition in Double Column.

	Copies.
1835, —Royal 8vo, published at 1s. 6d. per copy.	
Nov. 13.—Printed and stereotyped	2000
1836, Jan. —Second impression	5000
Feb. —Third do.	5000
April. —Fourth do.	5000
June. —Fifth do.	5000
Nov. —Sixth do.	10,000
1838, March —Seventh do.	5000
1839, Jany. —Eighth do.	5000
1840, Oct. —Ninth do.	5000
1838, Oct. —School Edition price 1s. 6d., First impression	12,000
Total,	59,000

gress of science or the increase of experience provided him with a new illustration or an improvement of the expression of his theories he availed himself of it; and this solicitude to keep the work in harmony with the latest discoveries in philosophy and science continued throughout his life.

In 1831–32 Combe wrote numerous articles for the *Scotsman* in the form of leaders, reviews, and letters; and in the summer of 1832 he was entrusted with the editorship of the paper during a fortnight's absence of Mr Charles Maclaren. One of his articles in 1831 consisted of an appreciative review of Dr Richard Whately's "Lectures on Political Economy," and this circumstance, combined with a similarity of ideas on many social and philosophical subjects, resulted in a correspondence between the author and his critic, which subsequently led to personal acquaintance. Dr Whately was about this time elevated to the archbishopric of Dublin, and removed to that city; but whilst at Oxford he had felt some curiosity in regard to phrenology, and had allowed a cast of his head to be made. A duplicate of this cast he presented to Combe, with a request for an unbiassed decision on its development, observing at the same time—"If your science should ever be fully received, I am convinced that wigs or caps would be reckoned quite as much an article of decency as breeches." Combe's first observation of the cast resulted in the following remarks:—

"There are many men in whom the intellectual organs are larger, although they are greatly above the average; but there are comparatively few in whom the moral region is so large in proportion to the base of the brain. It is the large size of the organs of the moral sentiments which communicates that vivid love of mankind, that reliance on the power of right, and that weight of character which distinguish your Grace. There is also a fine balance in the proportions of the feelings. The organs of the domestic affections are strong. Your Grace knows well the delights of an attachment in which the mind reposes with full confidence on its object, and meets a corresponding return. I do not allude exclusively to love between

the sexes. I do not know whether your Grace is married. The qualities to which I allude, although they form the basis of conjugal affection, are capable of expatiating on either sex, wherever high sentiment and the principle of attachment exist in the object. The organs of the propensities are of considerable size, and the full influence of the animal feelings has been felt; but they never had the ascendancy. There was at all times a vigorous monitor within who never slept. The anterior lobe is of ample dimensions, particularly in the powers of direct observation and reflection; but as already observed, the moral feelings inspire your intellect to work, and the operation in your mind is the opposite of that which takes place in the minds of nine-tenths of distinguished men when they write or speak on moral subjects. They employ the intellect to discover and to bring forth what they conceive to be truth. I am disposed to think that there is a well-spring of moral emotion in your mind, which presents truth to the intellect, and that its duties are confined to arranging, ordering, and perfecting the evidences of it, the labour of seeking for it being dispensed with. It is this high endowment of the moral sentiments that enables a person to see Christianity as practically adapted to human nature, and that gives faith in the progress of the race.

“I beg your Grace to excuse these hasty remarks, which are suggested by the first survey of the cast. I shall put it into the hands of Mr James Simpson, advocate, who is now in the country, and has not the least idea that such a cast is coming, and shall transmit his report. He shall receive no hint of the character or individual.

“Your Grace alludes to my belief in revelation. It is proper to mention that I regard phrenology as the philosophy of the New Testament. It appears to me to show the natural means by which the precepts of Jesus can be rendered really practical, and there are many passages in the Gospels which now appear to me to be literal truths, which before I knew this science I conceived to be rhetorical or oriental modes of expression rather than principles adapted to actual human nature. The Sermon on the Mount may be cited as an example. In doctrinal points I see greater difficulties. In particular, it appears to me that many of the arguments in favour of the prevailing opinions will not stand the test of examination under the lights of physiology. In Scotland, for example, the utter corruption of human nature is a standard doctrine. Phrenology shows that every propensity has a legitimate sphere of action, and that so far from the moral

sentiments desiring only evil continually, they long ardently after holiness, purity, and truth. I perceive also that the view of Christianity which gratifies a brain deficient in the moral organs is chilling and depressing to a mind in which these organs are large and active. In short, phrenology will bring about a great revision of doctrine, for it is only what is in harmony with the *highest* specimens of human nature that can ultimately maintain itself as true.

“When I read your observation in the ‘Lectures on Political Economy,’ that the existence of civilized man affords evidence of a primitive revelation, I made this note on it, which I offer with all humility to your consideration, viz., that each organ has inherent activity, and being active it produces manifestations conform to its constitution. Constructiveness, Imitation, and Ideality produce painting; Language, Ideality, and intellect produce poetry; and in like manner, the organs of the moral sentiments and intellect being active give rise to civilization. In the Phrenological Society’s collection we have specimens of skulls of almost every nation of importance which is known to Europeans, particularly distant tribes, and a phrenologist could make an ascending scale of their social attainments by observing the relation of their moral and intellectual organs in point of size to their organs of propensity, and which would be found to correspond very closely with their actual condition. I suppose him to be told the climate which they inhabit. In short, observation leads me to believe that order, law, and justice, are spontaneous growths of well-constituted minds, as much as music, poetry, and sculpture, and hence the fundamental importance of improving the brain.

“If your Grace saw a thousand heads of Irish peasantry and a thousand heads of Scotch or Swiss peasantry, you would recognise the vast difference in the coronal region, corresponding to their characters.”

As this case affords a good example of the method adopted by the leading phrenologists in dealing with the indications of character, it is given in full. Combe drew up the following development from the cast.

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|---|---|
| <ol style="list-style-type: none"> 1. Amativeness, rather large. 2. Philoprogenitiveness, large. 3. Concentrativeness, very large. 4. Adhesiveness, rather large. 5. Combativeness, ditto. 6. Destructiveness, ditto. | <ol style="list-style-type: none"> 7. Secretiveness, rather large. 8. Acquisitiveness, full. 9. Constructiveness, rather large. 10. Self-esteem, large. 11. Love of Approbation, large. 12. Cautiousness, full. |
|---|---|

- | | |
|--------------------------------------|--|
| 13. Benevolence, very large. | 25. Weight, rather full. |
| 14. Veneration, large. | 26. Colouring, moderate. |
| 15. Firmness, full. | 27. Locality, rather large. |
| 16. Conscientiousness, rather large. | 28. Number, moderate, or rather small. |
| 17. Hope, large. | 29. Order, moderate. |
| 18. Wonder, moderate. | 30. Eventuality, full. |
| 19. Ideality, rather full. | 31. Time, full. |
| 20. Wit, moderate. | 32. Tune, moderate or rather full. |
| 21. Imitation, large. | 33. Language, large. |
| 22. Individuality, rather large. | 34. Comparison, large. |
| 23. Form, rather large. | 35. Causality, large. |
| 24. Size, full. | |

This note of development and the cast were submitted to Mr Simpson—the name of the individual being concealed under the initials A. B. The only additional information supplied was that A. B. was forty-one when the cast was taken, that he was educated, and his temperament nervous-lymphatic. Here is Mr Simpson's report.

Character of A. B. inferred from Development.

“The size of the head indicates more than average power of character, and the temperament considerable activity, with liability to intervals of indolence. The direction of the character generally is essentially moral and intellectual. The animal part is strong enough for a sufficient manifestation of all its purposes, and to give a basis of strength and energy, but it is under due control by the moral sentiments and intellectual powers.

“There is a due estimate of self in this individual, with perfect confidence in his own opinions and actions, and at the same time considerable interest in what is thought of him by others. Love of praise and an impression that when bestowed it is due—with the elements of ambition—are inferred from the development.

“The character is honourable and fair, and eminently kind and generous. Exertions and even money will not be spared to do good to others; and solicitation is with difficulty withstood. There are the elements of hospitality. The domestic feelings—of love, love of children, and attachment to friends, are all strong.

“The intellect is much above average in the reflecting region. The reasoning powers are great, and the powers of concentrated continuous thinking remarkable, provided the subject of thought is agreeable; if the contrary, there will be a difficulty in persevering in it. This power of concentrative

thinking adds much to the products of the reflecting intellect, both in quantity and quality.

“The capacity of acquiring knowledge by observation is considerable, though not equal to the reflecting power. The historical memory, or that which stores events or things that happen, is not so vivid and retentive. The power of putting the thoughts into words is great, and will give great command of language; and the talent of undisturbed steady thinking, even amidst distracting occurrences, should give power of extemporaneous reply in debate. The eloquence will be unadorned and argumentative, with more logic in it than either wit or imagery. If there is eloquence, it will be the eloquence of the sentiments of justice, mercy, hope, and veneration. That the faculties should have manifested themselves in public speaking, however, depends upon the profession and circumstances. The power exists, and that is all that phrenology undertakes to point out.

“There should be some talent for drawing, though little for colouring. Interest will be felt in landscape. The powers of arithmetic and music do not appear to be great. The manner will generally be sedate and rather mild, without much elegance; but there will be a sensible plainness, and what may be called on the whole a weight of character. Nevertheless, the animal part, or base of the brain, being considerable, the individual may be easily excited to its peculiar manifestations; so that, occasionally, he may exhibit some degree of *spirit*, but such feelings will be short-lived, as the sentiments and intellect must almost habitually predominate.”

These remarks were put into the hands of two intimate friends of the archbishop, and both expressed their wonder at the accuracy with which the character had been unfolded, declaring that except in a few minor details they could find nothing in it to correct. Dr Whately himself, said:—

“The only thing that strikes me as an error is in one point, where I have always understood the cranioscopist is the most uncertain on account of the frontal sinus. There ought to be more bone than brain in my locality; for I have a great knack at losing my way; and my history is nearly blind of both eyes—chronology and geography.”

As he was still dubious about the science, he wished the cast to be submitted to another phrenologist without Combe's

development, and without other information than that the individual was educated and a statement of his age and temperament. Under these conditions the cast was forwarded to the Rev. Dr Welsh, who gave the following reply :—

“This belongs to the better order of heads. The man decidedly predominates over the animal. A. B. must be capable of enlarged views and generous and elevated sentiments, and I cannot think of him as indulging in anything grovelling or base. A regard to self will not be wanting, and he will be no stranger to motives of ambition ; but he will not allow his own interests to interfere with the claims of friendship or of general philanthropy, and his highest ambition will be the fame of works of usefulness or excellence. His talents for mechanics are such, that, if circumstances are favourable to their development, he may rise to eminence in that department ; though I am inclined to think that his tendencies will lead him more to moral and religious inquiries,—in which, if he is an author, he will express himself in a full and flowing style. If the subject of education is brought before his notice, it will excite a deep interest ; and few things would afford him more delight than the sight of a well-conducted infant-school. I shall only add that, in whatever sphere A. B. may move, his influence will be felt and acknowledged.”

The archbishop in commenting upon these observations says :

“I do not know that Dr Welsh’s and Mr Simpson’s accounts differ more than two descriptions of a man by his intimate friends often will ; and I suppose phrenologists do not pretend by the *mere* inspection of the head, to go *beyond* the knowledge which personal intimacy would give. What I was most struck with was, in the one, my difficulty of withstanding solicitations ; in the other my delight in an infant-school. The former, though well known to myself, was, I believe, never detected in my conduct.”

Writing privately to Combe, Dr Whately gave an account of the impressions he had of his own character, and also refers to the question of the civilization of savage races which was raised by Combe in a previous letter (page 266.)

Archbishop Whately to George Combe.

DUBLIN, 2d Sept. 1832.

"DEAR SIR,—Many thanks for your obliging letter. As Mr Simpson is left in ignorance of all circumstances respecting the owner of that skull, of whom you know some, I think you had better be put in possession of as many as possible, that you may compare the character with his judgment on the cast. I will omit, however, all mention of points which might be collected from the published works of the said head, as you may judge of them for yourself; and I will also pass unnoticed any qualities or defects which appear to be neither above nor below an *average*—noticing such only as may be considered in some degree characteristic, and these I will confidentially lay before you.

"He was a prodigy in one and only one point—calculation, in which from about five to eight, he was much such another as the boys who have of late years been shown. But his tendency was never encouraged, nor the ordinary studies of his age allowed to give way. At about eight the talent left him, and he has been below par in calculations ever since. He has acquired a command of the English language by much practice and systematic study; not least by practice as a college and private tutor, which occupation was his forte. He now expresses himself with considerable fluency, and on a subject well digested previously writes rapidly, never stopping to correct: *afterwards* he submits his compositions to a most diligent revision. Some of his works have been not only retouched but written two or three times; others again have gone to the press exactly as taken from his dictation by his amanuensis. The comparisons which are found in his works cost him pains only in pruning down and omitting. He had always a bad memory for places and names of persons, for faces, and for chronology and geography. The facts of history he is always forced to fix in his mind by connecting them with some general principle illustrated by them (just as others remember a general principle through the means of fact), and he attends to general objects chiefly for the sake of species and genera, as others attend to classification only for the sake of individuals. He learned verses by heart with facility as a youth; but has lost the talent a good many years. In respect of books of entertainment, Shakespeare, Scott, and Crabbe, and Miss Austen's novels, are his chief favourites.

"Several branches of natural science, especially chemistry, physiology, and natural history have great attractions for him,

and he learns and retains these subjects more easily than any, but having never been enabled to make any of these a regular study, his proficiency in these branches is insignificant.

“The red ink marks* denote the points in which he has deliberately and habitually laboured to counteract his tendencies.

“He has been peculiarly happy in friendships, married for love, and has a family; much disposed to look up to persons of eminent wisdom and worth; prefers domestic retirement to public life; *wishes to be well thought of personally*, but has no sort of enjoyment in *rank, state, titles, pomp, &c.* As a boy and young man *excessively shy, very timorous* by nature: extremely *hesitating, doubtful, and irresolute*; slow in making up his mind and *easily shaken*; likes to have some one to save him the trouble of *deciding*, which fatigues and distresses him, even in insignificant matters. Being fully aware of these infirmities, he is practically what friends call bold and resolute, and enemies, rash and obstinate. When his *judgment* (for his feelings he dares not trust) tell him that a resolution is to be taken and kept to, he (in the sailor’s phrase) “hauls taut and belays,” and then can stand firm even when others constitutionally more resolute, and thence trusting themselves, give way.

“He was never subject to violent transports of rage, but to impatience of petty thwarting and vexations, chiefly when labouring under bilious or nervous disorders, to which he is very subject. Also naturally prone to *deep and lasting resentment* of affront; has been an ardent follower of shooting and fishing; it has been his lot almost always to be struggling to make money, first for the sake of independence, and afterwards as a means of accomplishing various objects relative to friends or to the public, but always found it irksome to be occupied with money matters. Supposed by his friends to be capable, if he would indulge a *vein of satire*, of making a *powerful controversialist*, and holding up an opponent to scorn, ridicule, or odium. *Extremely lazy*, though hard-worked all his life; capable of strenuous exertion for a particular object, much more than fitted for routine plodding business, especially if consisting of a variety of details; being particularly harassed at being called off from one subject to another, and having an especial desire to finish whatever he is about.

“If you will again look at that part of my ‘Political Economy’ you will see that I do not *rest the proof* on

* Here printed in Italics.

antecedent probability, but on historical evidence. I maintain it to be impossible that a tribe of perfect savages could unassisted, civilise themselves, on the *fact* that no such instance is on *record*; which it would have been, in some one instance at least, if it had several times taken place, as it would have done frequently had the thing been possible. I think *I* could easily reconcile these views to those of the phrenologists, but that is their business. I think the place where I have been most on their ground is in the rhetoric, Part II. What I chiefly find fault with them for, is, for blending too much two distinct things; their view of the connection of the faculties, &c., with the *brain*, and their statement of the *phenomena* of those faculties. Supposing both true, it is conceivable that a person might adopt the latter without the former. Now I think they are apt to attribute such consequences as result from the adoption of the latter, to the adoption of the other. As if any one should contend that without the Copernicus theory no one could know when to expect the light of the sun.

“ Believe me to be, with much esteem, very faithfully yours,
“ R. D.”

Replying to this letter Combe wrote on the 14th September 1832 :—

“ There are few phrenologists capable of inferring natural dispositions from a cast; because an extensive knowledge of the elementary functions of the faculties, of the effects of their combinations, and observation of the manifestations of living men must be combined to give this talent. For seven years I have chosen servants by their heads, and watched the actions of numerous individuals in every rank of life to which I have had access, and have thus accumulated experience; but few have had courage to put phrenology in practice to this extent except Mr Simpson, and two or three more. I have repeatedly hired servants because their brains indicated high moral qualities, in the face of bad characters given them by previous employers, and have found nature true. There is such baseness in the world as giving an unfavourable account of a good and useful servant, in order to retain him or her in the employment of the master.

“ I shall use the freedom to make a few observations on your Grace’s remarks drawn through with red ink in your letter of 2d September—‘Wishes to be well thought of, but has no sort of enjoyment in *rank*, state, &c.’ This observation

gave me the highest satisfaction ; because I have long maintained that whenever Self-esteem and Love of Approbation, large, are combined with high moral and reflecting faculties, they instinctively take the direction of moral and intellectual qualities, and feel artificial rank to be a bauble. This combination occurs in your Grace, and the sentiment which accompanies it is the desire of praiseworthiness, and an utter aversion to all exaltation not preceded by this qualification.

“ ‘As a boy and young man excessively shy.’ The combination which produces this character is explained on p. 576 of the ‘System of Phrenology.’ The leading elements in it are large Self-esteem, Love of Approbation, Cautiousness, and Conscientiousness with moderate Combativeness. The feeling is the result of the fear of not acquitting oneself to advantage.

“ ‘Very timorous,’ ‘hesitating,’ ‘doubtful and irresolute,’ ‘easily shaken.’ This is the result of Cautiousness, Conscientiousness, Veneration, and Love of Approbation large, with moderate Firmness. Firmness is not so large as Benevolence, Veneration, and Love of Approbation in the cast, and in early life these would produce precisely the effects described. A high moral development always makes the character more timorous when Cautiousness is considerable, because there is the fear of doing wrong, added to the apprehension of other consequences. A youth with moderate moral organs fears only the consequences : one in whom these are large fears error or wrong on their own account. I can understand the practice of resolution when the judgment is satisfied ; but there will be the feeling that this requires an effort. One effect of a powerful intellect combined with high moral sentiments, is to give a more profound and extensive perception of principles and consequences, and a stronger feeling of *imperativeness* in conduct, than are possessed by inferior minds, and conduct actuated by these views and principles is often regarded as stubborn by those who perceive only the surface of affairs and are captivated by expedients, or who regard a deep sense of the obligations of morality as a weakness. There is no discrepancy between your statement and Mr Simpson’s inference in regard to Firmness. ‘Prone to deep and lasting resentment.’ This arises from wounded Self-esteem and excited Destructiveness. I could quite well understand the existence of this feeling in your Grace ; but I would have expected its speedy subsidence. I know individuals professing a combination similar to yours who say that they feel degraded by the recurrence of the sentiment of resentment in their own minds, and that after a few days or weeks it entirely disappears. Your feeling must have

occurred chiefly in youth. He could 'indulge in a vein of satire, and hold up his opponent to scorn, ridicule, or derision.' It is observed in the 'System of Phrenology,' 172, that Destructiveness 'gives edge to sarcasm, satire, and invective ;' and in a letter which I received a few months ago from Miss Kemble, she made this observation, 'that she was strongly prompted to write satire, but her conscience told her that it required at least as much ill-nature as wit to do so.' This remark was acute, and when analysed was strictly phrenological ; and I have no doubt that your Grace has had a similar feeling. There appears to be a discrepancy in regard to the talent for wit between your character and Mr Simpson's sketch ; and it is remarkable that this is an organ about the functions of which great difficulty exists. Humour is the result of Secretiveness and Wit acting in combination, and Imitation heightens it. (*Vide* 'System,' p. 196). I have observed that a moderate endowment of Wit, with much Imitation and Secretiveness, serves to give a talent for humour, but I would not have expected a high vein of pure wit, apart from humour, from the organisation indicated by the cast. I cannot ask you to read the observations on Wit in the 'System,' p. 340, but if one or other of the gentlemen who kindly sent me their remarks would do so, I should be greatly obliged by his opinion how far the manifestations bear out Mr Watson's analysis of wit on p. 347. I have again carefully examined the cast, and see that on the left side this organ is full, but it is decidedly less on the right side (a common occurrence) so that taking the two organs, the development is not a predominating power. Your remarks in regard to locality are perfectly in correspondence with the doctrine about the frontal sinus, stated on p. 83 of the 'System.' I regard your Grace's case as a very valuable addition to the evidence in favour of Concentrativeness. That organ runs curiously. The convolution proceeds forward, under the organs of Firmness, Veneration, and Benevolence, till it comes into connection with the anterior lobes, the seat of intellect, and I am not aware of any other organ presenting a similar appearance."

In another letter Combe noted, as a curious circumstance, that the power of calculation having been at one time great in the archbishop, should have disappeared. But at the time the cast was examined he believed that the manifestations and development were in harmony. Referring to himself he said :

"This organ [of number] has always been small in my head ;

and up to the present time I am not master of the multiplication table, and cannot with confidence perform any arithmetical operation, although conversant practically with figures. . . . Phrenology only enables its disciples to explain, analyse, and illustrate mental phenomena without creating them or their laws. It stands in the same relation to mind that the science of chemistry does to inorganic matter. When phrenologists speak as if their doctrines created mind, they err."

Phrenology, however, afforded so wide a field for speculation, and the experience of its professors was at the time so limited, that it was not at all surprising if erroneous views and doctrines were occasionally introduced. But Combe maintained that the principles were in many respects so new that phrenologists were sometimes condemned merely because they were tried by old standards and found deficient, when in point of fact they were correct. The impression made upon Archbishop Whately by the experiments with his cast will be clearly understood from the following letter written by his lordship in 1836, when Combe was a candidate for the chair of logic in the Edinburgh University.

Archbishop Whately to George Combe.

"DEAR SIR,—I have no hesitation in repeating what I have often said before, that I have derived both entertainment and instruction from the perusal of your works. In some points I differ from you, and in several others I remain in doubt; but much that you have said I consider as highly valuable. The anatomical and physiological portion of phrenology—what I believe you call organology—demands more attention than I have had leisure to bestow, to enable a cautious inquirer to make up his mind upon it. But I am convinced that even if all connection of the brain with mind were regarded, not merely as doubtful, but as a perfect chimera, still the treatises of many phrenological writers, and especially yours, would be of great value, from their employing a metaphysical nomenclature far more logical, accurate, and convenient than Locke, Stewart, and other writers of their schools. That the religious and moral objections against the phrenological theory are utterly futile, I have from the first been fully convinced.

That clever article in the *Edinburgh Review*,* to which you replied, I consider you as having completely and decisively refuted. Your answer did not indeed establish the truth of your theory, nor appear^d to have such a design; but in repelling those particular objections against it, you were triumphant.—Believe me to be, with much respect, your faithful humble servant,

“ RICHARD DUBLIN.”

This letter is quoted here in order to complete the sketch of Archbishop Whately's opinions of phrenology; the immediate cause of its being written will be explained in a future page.

In this year, 1832, Combe was left as the sole chief of phrenology, or, as one might say, the last of its three first apostles. Gall was gone; and Spurzheim followed. Although there were many who gave serious attention to the new science, many more who merely dabbled in it and sought the gratification of their own vanity in declaiming its merits, Combe, after the deaths of Gall and Spurzheim, stood alone as the leader of the new philosophy, and as the chief discoverer of its applications to the affairs of life.

On the 20th June 1832, Dr Spurzheim sailed from Havre to New York. His reception in the United States was most cordial, his own works and those of Combe having obtained for phrenology a considerable number of intelligent disciples. On the 17th September he commenced a course of lectures in Boston, and soon after another course at Harvard University, Cambridge. He was thus occupied six evenings during the week, and he, besides, delivered during the day-time five lectures before the medical faculty on the anatomy of the brain. These exertions, combined with the demands made upon his time by social duties, placed too great a strain upon his constitution. The change of climate had also some effect upon him; he caught a cold, which resulted in a low fever, and after fifteen days' of illness, he died on the 10th November,

* By Lord Jeffrey, in No. 88. See page 187.

His loss was regarded with much regret, and every respect was paid to his remains. The funeral was a public one ; and the body, after being embalmed, was interred in one of the vaults of the Mount Auburn Cemetery. An address by Dr Follen, the professor of German at Harvard University, formed part of the service. The first intimation of Dr Spurzheim's death was conveyed to Combe by a letter from his publisher, Mr Nahum Capen, and in replying he said:

“ DEAR SIR,—I offer you my warmest acknowledgments for your very interesting letter of 15th November, announcing the lamented death of Dr Spurzheim. The subject was painful and distressing, but your kind attention was highly appreciated. I read the communication to the Phrenological Society, and prefix an extract from their minutes which I request of you to circulate as widely as possible among your countrymen, that they may receive the humble expression of our gratitude for their admirable treatment of Dr Spurzheim, and for the honour which they paid to his remains. Individually I felt as if I had lost a near and dear relative and friend.

“ To Dr Spurzheim I owe an unspeakable debt of gratitude which it gave me joy to express when he was alive, and which I shall never cease to acknowledge while my own being continues. He found me an anxious but disappointed inquirer after the philosophy of man, a lover of mankind, but ignorant how to do them any good ; a firm believer in a superintending providence, but utterly incapable of comprehending the principles of the moral government of the world. I was unhappy because I had blind desires which I could not gratify, and longings for good and knowledge, which were nowhere to be found. Dr Spurzheim gave me light ; the world cleared up under his tuition ; my moral and intellectual faculties from being spellbound became active. I experienced the delight of having my various powers placed in harmony with each other, and I saw how the good which I desired might be practically realised. To the man who conferred these gifts gratitude unbounded was due, and when he added to them an affectionate and abiding kindness as a friend, you may judge how deeply I deplored his loss. The whole conduct of your countrymen towards him was excellent. In one particular only would a knowledge of Dr Spurzheim's own wishes have made an alteration. I have often heard him say, “ When I die, I hope they will not bury my skull—it will prove what my dispositions

were, and afford the best answer to my calumniators. I should like much to have a cast of the *skull* if one was taken.* We have casts of the *head* already, and an admirably modelled bust by Laurence Macdonald, the boast of Scotland as a sculptor, executed in 1828. I sent the account of Dr Spurzheim's death to one of his friends in London. I do not know his relatives on the Continent."

Combe was urged by his American friends to proceed at once to Boston, and complete the work which Spurzheim had commenced; but this was impossible at the time, and referring to the subject in a letter to Sir G. S. Mackenzie he said:—

"I do sometimes regret, when such openings present themselves, that I have not an independent income, to enable me to cut the law, and discharge a higher duty to society. If I had £300 a year independent of professional business I would dedicate my life to phrenology, but other men will be found in due time who will probably do the work better. No man whose brain does not exceed the average much more than mine does, is of importance to the world. I should do all that lies in my power, in the circumstances which have been allotted to me, but my place may be easily supplied."

Sir George Mackenzie, who was an enthusiastic admirer of Combe, and a firm believer in his philosophy, suggested that a fund should be raised to set him free at once to devote all his time and energies to the propagation of phrenology. To this suggestion Combe replied:—

"I feel very warmly your kind interest in regard to putting it in my power to pursue phrenology as my sole business. I expect in the course of a few years to arrive at that state by my own exertions. My plan has uniformly been to live somewhat within my income, but not to forego any reasonable enjoyments for the mere sake of saving money; and in consequence I have always been at once comfortable and rather advancing in wealth, although very slowly, and on a small scale. From the day when my apprenticeship expired to the present hour I have been the sole author of my own fortunes. I earned the money for passing Writer to the Signet, and for paying every thing that I have done and used since, and I have not yet drawn one shilling of patrimony. At Martinmas

* Casts of the head, brain, &c., were prepared, and several sketches of the face were made by different artists,—one by Audubon, the ornithologist.

next I shall, however, get payment of the property which was my father's, sold to the Commissioners of Improvements for £9650, and of this about £1650 will be my own. My nephew Robert Cox is now a W.S., and has excellent talents for business, and in the course of a few years I expect to be able to devolve a large share of the business on him, and be able to command more time. In these circumstances I would not wish any one to raise a fund for my use. The money left by Mr Henderson will not become tangible to any great extent for some years, as his father's debts are not paid, and no legacies can be paid until they shall be extinguished. Besides, I would not consent to any portion of that fund being devoted to my personal advantage. My sole object in mentioning that I would betake myself to phrenology if I had £300 a year clear, was to show you how much it is in my affections, for my profession is worth three times that sum in good years.

“In regard to lecturing at Inverness, I would greatly prefer Aberdeen, as the seat of a university, and a larger and more influential town. If I could get an invitation I would go to Aberdeen in April or October next, but I would not like to pass it and appear first in Inverness or Elgin. I have more the talent of drawing an earnest attention from the hearers who come to me, than of collecting a crowd and extracting money from them. My lectures in Dublin left me exactly £30 clear after paying expenses. If I had been employed for the same number of days as a W.S. at the regulation fees I would have made 90 guineas. My lectures in Edinburgh could not subsist, if the hall were not my own property, and other expenses trifling. It is the experience of this that renders it indispensable for me to have an income independently of phrenology before devoting my life to it.”

He received a second invitation to go to America to lecture and was assured that he would make as much money as would compensate him for some sacrifice at home. But his profession was not one which could be abandoned and resumed at pleasure, and he prudently resolved not to alter his course until he had secured the independence he desired. His name, however, was kept prominently before the American public by new editions of the “Elements of Phrenology,” the “System,” and the “Constitution of Man,” for a revised edition of which special arrangements were made with him by

a Boston publishing firm—Messrs Marsh, Capen, & Lyon. He entertained a profound admiration for the American people; but he was not blind to their failings and the dangers which lay in the future. Writing to Mr Capen in November 1833, he said :—

“America, until the year 1830, was the most interesting spot on earth; since freedom was conquered in France, and torn from the oligarchy in England, these two countries have entered the lists with America. I cannot see the result of your excessive love of business and money-making, nor of our love of gain and depression from taxation. If America could get her eyes opened in time to the importance of the rational portion of human nature, and frame her social habits and institutions with due reference to it; if she would lessen her hours of labour, increase her hours of study, award honour and consideration to moral and intellectual attainments, and value wealth without worshipping it, she would become the first nation on earth. Her situation is truly enviable: being free from the trammels which bind society to erroneous practices in every country of Europe, she may adopt rational institutions with more facility than any other nation. If the propensities and lower sentiments continue in predominant activity the union will fall to pieces, the States will fight, and, like the Scots and English of old, they will punish each other for departing from God’s moral law. I trust, however, this humiliation of our nature will be avoided.”

In the same letter he referred to an article in the *North American Review*, which took much the same attitude as the *Edinburgh* towards phrenology, and he said :—

“No good article ever has been or ever can be written against phrenology for an obvious reason :—If the brain be good, and if the subject has been studied, conviction is inevitable. If the brain be good, but the subject has not been studied, there must be gross misapprehension. If the brain be poor there will be natural incapacity to perceive the truth: so that the two circumstances indispensable to all good writing on the subject—a good brain and sufficient study—never can be united and opposition follow.”

He discovered that the prejudice against the new science was so great that even men of intellect would pass over important suggestions, if expressly made under its influence,

whilst they would give serious consideration to the same ideas if presented without any reference to the philosophy which inspired them. He received an amusing illustration of this conflict of truth against prejudice in the effect produced on Lord Jeffrey and Lord Brougham by a pamphlet prepared by Mr Simpson, on "Criminal Legislation." Combe had written several articles on this subject in the *Phrenological Journal*, and particularly one in the March number, condemning the views expressed by Archbishop Whately, who pleaded for severity against criminals. Combe argued that mere severity would not suffice to deter the evil disposed from committing crime, but that profounder principles must be brought into operation. He believed that "the prospect of being seized, shut up, and treated for a series of years as a moral patient, forced to labour and to practise morality, would operate as a restraining motive on this class of minds more effectually than the infliction of mere suffering and privation." He especially urged upon the Government the necessity of educating the offspring of the criminal class. His arguments were not noticed; but when Mr Simpson expressed the same ideas and in the same words in many instances, only omitting the phrenological terms, both Jeffrey and Brougham read and, to a great extent, approved of the views, and complimented the author of them!

The idea of marriage had often occurred to Combe's mind in his playful moods, and as often in the hours of serious meditation. He was endowed with an affectionate nature, and although its impulses were sternly controlled by reason, his capacity of attachment was large. He could speak the bitter truth to those whom he loved most; and he accomplished more by counsel, besides giving more substantial assistance to those who required it, than the man of mere sentiment could have done. The gratification of his own feelings was never his first thought, and before taking any important step he carefully considered all the possible con-

sequences to those around him, as well as to himself. When Dr Welsh intimated, in 1830, his approaching marriage, Combe wrote in a kind of bantering humour, which he frequently adopted towards those with whom he was familiar:—

“ All I can say is, briefly that I wish you may enjoy every possible felicity, and that I highly approve of the married state (*as an abstract proposition*). I trust you have satisfied all your faculties. I should like to know, indeed, as a matter of philosophy, whether you have done so. You know that I have often been in love with one-third, one-half, or two-thirds of my brain, but unfortunately never with the whole of it out and out. While many faculties were satisfied, there still remained some which would have required to be silenced, and my conviction is that this is inevitable where the faculties honestly do their duty, and I shall be prepared accordingly to make a small minority yield, when my turn shall come, following the wise rule of the Jury Court (which was so happily illustrated lately in the Dundonnell cause)—that of securing unanimity by starvation. But seriously speaking, it is a most difficult affair to find a wife who will satisfy the human faculties on the following points:—1st, Physical constitution, keeping in view health, adaptation of temperament, and hereditary diseases; 2d, Combination of organs in the brain; 3d, Education and acquired ideas. A young friend of mine in possession of an excellent constitution, favourably developed brain, fairly educated, and having reasonable means of living, offers seriously to pay his addresses to any young woman whom I shall recommend as suitable in these particulars, knowing perfectly that love will not be long absent where the faculties harmonize, and in the whole circle of our acquaintance there is not one who comes near the point. The race must have suffered prodigiously from ignorance of the organic laws; because there is no such thing to be found as a tolerably pure stock, and the evils are clearly referable to foolish alliances with unsuitable partners. The difficulty is increased when the relative qualities of the parties are taken into view. Were I seeking a wife, my own physical condition would be an obstacle as great as that of imperfect health in the lady, and yet I am a sounder man in health and vigour than many of my acquaintances who never hesitate on that score. A few letters of a philosophical nature from you just now would be highly interesting and useful. I trust you have got a lady with a large coronal region. This is the grand element in my estimation. A woman with large moral sentiments, fine

intellect, and big adhesiveness is a perfect treasure, and is a companion meet for the best of men."

It has been mentioned that Combe numbered amongst his friends Mrs Henry Siddons, the wife of a son of the great actress Mrs Sarah Siddons, and sister of Mr Murray the lessee of the Edinburgh Theatre Royal. At her house in 1831 Combe met Miss Cecilia Siddons, a daughter of the famous queen of the stage. The first impression made upon him was that Miss Siddons was so amiable, and so circumspect in thought, word, and action, that they would never get beyond civilities. He had learned, however, that she had "discharged a great duty of attendance on her mother in an admirable spirit," and as she was an admirer of some Dublin friends of his, the basis of an acquaintanceship was established between them. Writing in November 1832 regarding his lectures, he says:—

"I began to lecture on 6th November from 3 to 4, and have only 11 paying auditors and 5 free; but I repeat the same lecture at half-past eight, and have then 210 regular hearers and generally about 20 visitors. This is the class for shopkeepers, clerks, and students. Dr Murray lectures in the evenings to the same sort of people on chemistry and geology, and has above 200 also attending. In my afternoon audience I have Miss Graham [Duntrune] and her two nieces, Miss Elizabeth and Miss Cecilia Siddons, Mrs Johnston (Meg Dodds), Dr Fortique, Miss Neil, and two Quaker ladies. This collection of friends of fine qualities gives interest to the lectures."

Miss Siddons became a frequent guest at Northumberland Street; and the following extract from a letter addressed to Miss Fanny Kemble (who had gone to America on a professional tour) will afford a glimpse of the happy association of the lovers:—

"Andrew has been living with us all winter. He has ridden out every day, and stood the cold not only well, but has gained ground. He is now free of all complaints, and requires only consolidation. He goes to Paris in ten days, to pass the summer in cultivating his profession and strengthening his chest. He hopes to return in autumn in a condition to resume practice during winter. He is printing a new book on the

application of physiological principles to practical conduct. Some portions of it have appeared in the *Phrenological Journal*, and been much admired. Your cousin Miss Cecilia Siddons has painted two portraits of him, and is busily engaged at a third ! The first was very good, so much so, that the doctor requested a copy to send to a friend (not a lady) in Switzerland. Miss S. made a second original, and it turned out quite admirable. It is absolutely beaming with the happiest expression that the doctor's face displays in his best moments. It has been a source of great regret that so fine a portrait of him is going so far away, and she has kindly set about a third. I am sitting to her just now, but am a much inferior subject for the pencil. I have not seen what is done, so can offer no opinion. Your cousin has been one of my most assiduous and successful students this winter. She has taken a great interest in phrenology, and has also attended with much advantage Dr Murray's lectures on geology. Her health is much improved ; she is active, cheerful, and full of amiableness. She is a great favourite with all our circle, and it is alleged that even my grey hairs have scarcely been sufficient to protect me from her influence."

In April 1833 the engagement of Combe to Miss Siddons was made known, somewhat to their chagrin, for the marriage was not to take place until September. He wrote to Mrs Kemmis, Dublin, in reply to her congratulations, 30th April :—

"It is quite true that I am about to change my condition, and I can scarcely tell how it has come about. The lady's head and mine bear a close resemblance in many of the most important organs, and there was a natural sympathy established between us from the first, which insensibly ripened into a more serious attachment. She is six years younger than myself, and her interests are of a moral and intellectual character, so that she is fitted to be a companion to me, and will go along with me in my pursuits. The projected union will not take place until September. It was sent abroad by a blunder, and then we had no alternative but to announce it, although it is too long to have such a matter hanging in the wind and the subject of discussion. I have obeyed all the natural laws so far as my skill and knowledge went, and if evil happen I shall learn a new chapter for the instruction of others. In 1828 I took Dr Spurzheim's opinion on my own constitution, after telling him my previous history, and he said that I might marry with propriety, but not to select a young

wife, but one whose higher faculties would act with my own. I examined the lady's head, and took my brother's advice whether her constitution was good in itself and suitable to mine, and received a favourable opinion. My niece, Miss Cox, who is a pretty sagacious judge of women, told me that if I did not make love to Miss Siddons I need never expect to find another so well suited to me ; so that I did not yield blindly to inclination, or act without calling in the best guides to my own judgment I could. This is confidential, and is mentioned just to let you know that I do not preach one doctrine and practice another."

The reason why, at an early age, he had determined not to marry at all, or at any rate not until he felt sure of his own fitness for the married state, was owing to a scrofulous skin affection, which, however, was not constitutional, but due to the low damp situation, and the bad air of Livingston's Yards, combined with low diet. When he found that he had out-lived the effects of these conditions he believed himself justified in marrying, especially as the lady would be, at the date of the ceremony, past her thirty-ninth year, and therefore posterity could suffer little even if he should be wrong in the estimate of his constitution. His consideration of such matters show the thoroughness of the man's nature and convictions. On another important subject he wrote to his brother Dr Combe introducing the statement by a disclosure of his feelings, which should have a place in the narrative of his life :—

" Every step that I have advanced gives me increasing confidence and satisfaction. Her letters show very superior business talents and thorough rationality ; and in our 'affectionments,' she becomes gradually more open and more at her ease ; and good feeling, regulated by fine taste and sterling sense, are all that I have yet met with. But recollect that I am in love. On religion we are at one. She wrote me that she had seen doctrinal religion do so much harm to the character that she had shut her mind against it, and endeavoured to do only what is right, and trusted in God. I told her that this was exactly the result which I had reached by philosophy ; that I could subscribe to the articles of no church, but admitted all the practical duties of Christianity to be of

divine authority, because they are founded in nature. I acknowledged the advantage of public worship, and offered to be a hearer in any church where she could find most practical sense and least doctrine preached."

He entered into the most minute details as to his past and prospective expenditure, being resolved that everything should be made perfectly clear to his intended wife before she should unite her fortunes to his. She possessed £15,000; he arranged that the whole of this sum should be settled upon herself, and that the entire control of it should rest in her hands. As to their expenditure, he thought they should not in prudence exceed £1000 or £1200 a year including everything. His professional and other income was more than he here allowed for spending, in addition to her income; for he believed they should not "run a fluctuating revenue hard up, but keep well within it."

"My total expenditure in my housekeeping for some years has been as follows, including rent, taxes, wine, wages, and everything—the family consisting of Miss Cox, Mr Ainslie [who was for a short time a nominal partner in Combe's business], the Doctor, myself, a boy, and three maid servants, but exclusive of furniture, all my own expenses, and the horse:—1828, £568; 1829, £547. In these two years the rent was £120 per annum. 1830, £481; 1831, £446; 1832, £434. In these years the rent was £90; no wine was bought, a large stock having been on hand; and the Doctor and Miss Cox were absent in 1831 and 1832."

Regarding the future he wrote: "My personal expenses will not exceed £75 a year. You estimate your expenses at £160. Horse, drosky, and male servant's wages, say £100; rent and taxes, say £160; which would leave for housekeeping and other expenses, supposing us to spend £1000 per annum, £505."

One of his arrangements was of a character to strike those who did not know the man with wonder. He desired that in the event of his wife surviving him she would permit his skull to be given to the Phrenological Society, remarking that—"It will do me justice hereafter, should any curiosity exist regarding my qualities." The marriage took place

in Edinburgh on the 25th September 1833, and Mr and Mrs Combe instantly started on a tour through Kinross, Dunkeld, Blair-in-Athol, Kenmore, Killin, Dalmally Inverary, Dumbarton, Glasgow, Lanark, and home, after eleven days of fine weather, spent amidst beautiful scenery and under the happiest condition of life—that of the first days of marriage in which two souls enter a new world, and are conscious only of its sunshine. They had taken the house 23 Charlotte Square; the Doctor and Miss Cox remained in Northumberland Street, but in all essential respects the two families continued to live as one, although dwelling under different roofs. Combe's affection for Miss Marion Cox was increased by his respect for her intellectual qualities, and on the day of his marriage he wrote to her expressing his gratitude for the assiduity and devotion she had displayed in the management of his bachelor home, accompanying the expressions with a substantial token of his esteem.

The marriage was a happy one, and throughout the succeeding years of his life Mrs Combe was the faithful and admiring companion of her husband. That she was a lady of some acquirements has been already indicated in the letter referring to the portraits which she painted of the doctor and of Combe. She had also literary aspirations and attempted several plays, besides writing part of a novel and various short sketches. Although these productions were never published, the mere production of them is suggestive of a refined nature, and the fact that they remained in manuscript, unknown to her intimate friends, is evidence of admirable self-control. The plays and the novel show the average ability of a cultivated woman with literary tastes, and are quite equal in merit to the mass of similar works which are printed and published. Her cleverest performance was a conversational explanation of the principles of phrenology, intended for the use of children at home and in schools; but she did not complete it. This work she commenced some years after her marriage, when her

knowledge of the subject was largely extended by association with her husband.

After his short holiday Combe returned to work with increased pleasure, and six months' experience of the married state had only intensified his joy in it, for he wrote to Laurence Macdonald at Rome:—

“I am very, very happy, and have found the reality of matrimonial bliss to go far beyond my expectations. I have often told you that with me fortune has always been better than her promise, and in this last instance she has kept true to her previous character. My brain was made for affection, and although I was happy as a bachelor, there was still the consciousness of a want; there was a vacuum which could not be filled up,—a desire that was not satisfied. My dear pet wife, as I call her, has dispelled all these wants, and filled the void in my affections completely. Further, she possesses that exquisite balance between intellect and sentiment, and that admirable soundness both of judgment and feeling, that render her ever interesting to my faculties. She loads me with a genuine, single-minded, warm affection, and manifests a ceaseless interest in my person, affairs, and pursuits. There is an ever-present delicacy, dignity, tact, and judgment in all that she says and does which challenge my highest esteem. I am thus gratified in affection, delighted in intellect, and not a little pleased in my feelings of ambition, to have ended in obtaining so excellent a partner for life. My enjoyment is enhanced by seeing that I am really rendering her happy.”

Mr Macdonald was one of his most intimate friends; Combe had the profoundest faith in his genius as a sculptor, which subsequent years more than justified, and he gave him his entire confidence as a friend. It was Combe who made the arrangements which enabled Macdonald to proceed to Rome in 1832, in order that he might study in the best school of his art. Macdonald profited by the privileges his friend secured for him; his own genius accomplished the rest: he won high honours; his fidelity to those who had been the first to respect his genius never faltered; and by his success he made them proud of the assistance they had given him.

During the three years embraced in this chapter phrenology

had gained ground in various parts of the world. In Scotland there had been an apparent subsidence of interest, which induced Combe to refrain from lecturing in the winter of 1831-32; but the increasing sales of his phrenological works proved that the interest in the science was becoming more extensive every day. He wrote to Dr Otto, Copenhagen:—

“Phrenology has ceased to be an object of ridicule. It has disappeared from convivial conversation, and nearly also from the pages of the periodical press. The public in consequence imagine it to be dead; but we know that more minds are engaged in the serious study of it at present than at times when the public conceived it much more triumphant. Its principles are appearing in publications of various kinds, and it occasionally extorts reluctant approbation from its greatest enemies.”

Then came, almost simultaneously, the translation into German of Gall's chief work in six volumes, and of Combe's “System.” The latter was translated by Dr Hirschfield of Bremen, and was published at Leipsic in 1833, very soon after the appearance of M. Prosper Dumont's translation into French of the “Constitution of Man.” The number of lecturers on the science was multiplying in England, Scotland, and America; in Paris a society was formed and a journal published similar to the Edinburgh *Phrenological Journal*; and, the most important point of all, the direct bearing of phrenology on education was, thanks to Combe's persistent labour and watchfulness, beginning to be understood. It has been already mentioned that Combe's evening lectures to the middle and working classes resulted in the formation of the “Philosophical Association for procuring Instruction in Useful and Entertaining Science.” At the end of the course referred to—that is in April 1833—he delivered three lectures on education—constructed, for the most part, from articles in the *Phrenological Journal*, which were felt to be so valuable that they were published in a pamphlet, and they were immediately afterwards reprinted in *Chambers's Journal*—a

that time the most popular of cheap periodicals—by the request of Robert Chambers. Again, in November, they were delivered as the introduction to the winter session of the Philosophical Association at the solicitation of the directors. At a later period a portion of the lectures was incorporated in the “Constitution of Man ;” but the public demand for them in a separate form continued to be so great that they were republished in 1837. In these lectures he presented an admirable sketch of what popular education should be. He started with the theory that education should provide “a correct view of the nature of man, and of the objects and duties of life.”

“Hitherto,” he said, “education has been conducted too much on the principle of looking at the world only out of the window of the school and the college, and teaching the names of the beings and things therein contained, in a variety of languages, to the neglect of the study of the beings and things themselves ; whereas man, as a creature destined for action, fitted to control nature to some extent, and, beyond this, left to accommodate his conduct to its course, requires positive knowledge of creation, its elements and laws, and has little use for words which go beyond the stock of his ideas.”

He desired to have *practical* knowledge placed above the mere acquaintance with words ; he would, therefore, have Greek and Latin to constitute only departments of the general system of tuition. He cited the case of Professor (Sir Robert) Christison, who, having devoted five years of his youth to the study of Greek, and attained some proficiency in the language, found it of so little value to him in the course of his professional studies that he had almost forgotten it, while he had been obliged to study French and German for the sake of the medical information to which they were the means of access.

“Education, then,” said Combe, “consisting chiefly of languages, leaves the mind of the pupil ignorant of things, ignorant of men, and ignorant of the constitution of the social system in which he is destined to move. He is trained in abstractions and among shadows ; and when he enters practical

life he finds that his real education is only at its commencement. Education consisting of a knowledge of philosophy and science, on the contrary, produces an early and a deep impression that man is made for action; that he is placed among agents which he must direct, or to which he must accommodate his conduct; that every thing in the world is regulated by laws instituted by the creator; that all objects which exist—animate and inanimate—have received definite qualities and constitutions, and that good arises from their proper, and evil from their improper application. This education makes known what these qualities are. It invigorates the understanding, and gives boldness and independence to the sentiments.”

A good education, he considered, was that which was most fitted to qualify a boy or a girl for the career they were to adopt in life. He would ground them well in English, arithmetic, and writing as the *means* by which they were to acquire further knowledge of whatever might be necessary to the fulfilment of their practical duties. In languages, he gave the preference to French, German, and Italian as more valuable acquirements to the mass of people than Latin and Greek. He particularly urged upon his hearers the study of chemistry, physiology, anatomy, natural history, and natural philosophy as the keys to a useful knowledge of natural objects and the laws of their actions. He referred to the Prussian system of compulsory education, and strongly advocated its introduction into this country. This was more than forty years before the system of compulsory education became law in England; and Combe’s foresight of the necessity for such a law earned for him a good deal of severe comment on his readiness to interfere with the liberty of the subject. He further advocated the limitation of the hours of labour, especially in regard to children; he left religious instruction in the hands of the clergy, but on the condition that the parents should have the right to say whether that instruction should be directed by a Protestant or a Roman Catholic clergyman.

Turning to the question of female education, in his third lecture, he said :—

“I regard the great secular business of female life to be the nurture and rearing of children; the due management of domestic affairs; and the cultivation of those graces, virtues, and affections which shed beams of happiness on all the members of the family circle. These occupations are equally important to women as professions are to men; and, under a proper system of education, women ought to be taught every species of knowledge, and instructed in every accomplishment which directly contribute to the proper discharge of their duties.”

He thought the laws of health should be especially taught to women, because the lives of children depend almost exclusively on the care of the mother. They should therefore be taught “not only how to regulate their own habits so that they may preserve their health, but also how to treat children both as physical and mental beings. This information would be attended with great advantages whether they subsequently discharged maternal duties or not.”

“One important branch of female instruction, therefore, ought to be the treatment of children as physical beings. Lectures should be instituted to communciate this information, and the basis of it ought to be anatomy and physiology. The minutix of these sciences need not be treated of, but the leading organs and their uses, on which health and mental activity depend, should be explained. It is a great error to suppose that this study is necessarily shocking and indelicate. It is so only in the eyes of ignorance and prejudice. Indelicate descriptions of abuses of the bodily functions are highly objectionable; and the enemies of knowledge have represented this to be the instruction which I recommend. Nothing can be more unlike it. The Creator has constituted every organ of the body, and, in studying its structure and uses, we are contemplating his workmanship. To call this indelicate is to libel Eternal Wisdom. The Creator has taught the inferior creatures to rear their young successfully by instinct; but he has not conferred this guide on the human mother. One of two conclusions, therefore, appears to follow. He has intended either that she should use her faculties of observation and reflection in acquiring all the knowledge requisite for the proper treatment of offspring, or that she should recklessly allow a large proportion of them to perish. One

or other of these conclusions is really inevitable; because as He has denied her instinct, and as she cannot obtain knowledge to supply its place, without application of her intellect to the study of the laws of nature,—which instinct prompts the lower creatures to obey without knowing them,—the Creator must have intended either that she *should* study these laws or give up her offspring in vast numbers to destruction. The latter result actually happens to the enormous extent just mentioned; and, if it be the necessary consequence of the Creator's gift of reason, in place of instinct, to woman, I submit to condemnation; but if it be the natural effect of her not having employed that reason in a proper direction, I say that He has commanded her to study His works. If this conclusion be just, we may rest assured that she may safely, and in perfect consistency with feminine delicacy, study the Creator's designs, power, and goodness, in the structure, functions, and adaptations of the human body; and that she will not find her higher faculties outraged, but exalted and refined, by the knowledge which will thus be revealed."

He did not oppose the devotion of some portion of girls' time to acquiring accomplishments; he would have these taught, for they threw over the "domestic circle a charm which could not be too highly prized." What he condemned was the teaching of music, drawing, and conventional manners to the exclusion of all other kinds of knowledge. He summed up the purport of his three lectures thus:—

"I have endeavoured to show that man is a progressive and improvable being; that he is permitted to some extent to control the external elements, and apply them to his advantage; that where this power is denied he may, by observing their operation, accommodate his conduct to their influence; that to do either, knowledge of nature and its qualities is indispensable; that the command to acquire knowledge is thus written in his constitution; and that discoveries in science and inventions in art are intended to give him leisure for studying nature, and for cultivating his moral and intellectual nature."

Much of this will appear commonplace; but at the time it was spoken the views expressed were new, bold, and to many people offensive; in the course of years the truth has forced itself upon the public mind generally, and the first

speakers of it are forgotten. Combe told a correspondent shortly after the publication of the lectures that they had been attacked by the Teachers and the Tory press, "and for want of better arguments are charged with indelicacy, immorality, and infidelity. They might as well have added cannibalism and Hindooism." About this time Robert Chambers submitted to him the proofs of an article which was afterwards published in *Chambers's Journal*. The answer explains the position of phrenology at the period dealt with in this chapter, and also reveals Combe's view of the hesitation displayed by public writers in admitting its claims.

"I have perused the proof of the article 'Is Ignorance bliss?' and am gratified that you have found interest or advantage in my work on the 'Constitution of Man.' Considering that you are unacquainted with phrenology you have caught a good deal of the spirit of the book, but have not penetrated fully the principle of it ; and no one can do this or be competent to judge of its real importance who has not the conviction, from observation, of phrenology being true. There is only one sentence in your proof which I would have wished altered. You say—'There is unfortunately no system of knowledge of this kind, if we except phrenology *which has not yet established* itself sufficiently to be trusted to.' Locke somewhere remarks that truth never yet carried the day by acclamation at first, but that it was not the less *truth* although opposed at its first announcement. Gold, says he, is gold while in the mine, although not available to man until it be extracted. The same is the case with all sciences. The theory of gravitation was as true the first day that it was announced as it is now, and the circulation of the blood was as certain the moment it was accurately observed by Harvey as at the present day. If Drs. Gall and Spurzheim and their followers have accurately observed nature, their observations are as true now as they ever will be ; and if true they are as much to be trusted to as if phrenology had existed for a hundred years.

"Those who have studied phrenology sufficiently to satisfy their minds of its truth, trust to it, and it appears to me that they act philosophically in doing so. Those who have not studied it do not know that it is true, and therefore do not trust to it, and they also, in not trusting to it, act philo-

sophically. But when they say as a general proposition that 'phrenology has not yet established itself sufficiently to be trusted to,' they do injustice to those who have carried their observations farther than themselves. I may seem to be hypercritical in these remarks, but there is more importance in them than may at first appear. Phrenology, if true, is the revelation of a great chapter in the Creator's works. It is mischievous to the community at large to throw obstacles in the way of the study of that chapter; and it is unjust to those who have opened it up to the public eye to misrepresent their success. Every general announcement that phrenology is not to be trusted to is a reason assigned for not studying it, and is a positive condemnation of those who maintain that it is founded in nature. In every other science the testimony of those who have cultivated it most is, *cæteris paribus*, allowed to have most weight; and I have never been able to see why this rule should be reversed in the case of phrenology. The proper way of announcing the proposition contained in your article would be something like this: 'Phrenology is affirmed to be true by those who have bestowed most time in investigating it, but the public in general have so entirely neglected all due investigation into its principles and evidence that they are not acquainted with its doctrines and proofs, and consequently are not in a condition to rely on it in practice.' An announcement such as this would place parties in their true positions, and instead of affording an apology to the public for remaining ignorant, and containing an implied censure on phrenologists for propagating what is insinuated to be probably unfounded, it would suggest to the public the real condition of their own minds, and do phrenologists the justice that they are fairly entitled to."

In concluding this letter he says, *apropos* of the study of languages: "I have rather a natural turn for languages. I learned French from a fellow-apprentice (George Hogarth) without a regular master, and I was busy with German and Italian for pleasure when phrenology gave me higher views, and more substantial objects of pursuit." Writing to the same correspondent he made what appears to be a very just complaint regarding the administration of the Bridgewater trust. The Earl of Bridgewater died in 1829, and left the sum of £8000 to be applied by the president of the Royal Society of

London in paying any person or persons to be selected by him to "write, print, and publish one thousand copies of a work on the power, wisdom, and goodness of God as manifested in the creation." Dr Thomas Chalmers was selected for the task ; and he produced a work under the foregoing title. He adopted the principles announced in the "Constitution of Man," but modified by the theological doctrines of his church. Although his work was published five years after Combe's, no reference was made to the latter, whilst the subject was the same and the treatment in many respects similar ; nor was any reference made to phrenology, which, whether true or false in itself, had been the occasion of many new ideas as to the operation of the brain. Combe put the question to Robert Chambers :—

"Whether, after reading the title of the work designated by the Earl of Bridgewater as required to be written, you considered my book to any extent as an execution of the earl's object ? In short, does my book expound the power, wisdom, and goodness of God, as displayed in adapting the constitution of man to external objects, or does it not ? This was the theme prescribed by the earl. If I have to any reasonable extent executed it by anticipation, all I ask from the press is a simple acknowledgment of the fact. If I deceive myself, the total neglect of my book by all who have written the Bridgewater treatises, and by all who have reviewed them, is justice, and I have nothing to complain of.

"The leading principles of the 'Constitution of Man,' to which I attach value, and which seem to myself to be original, are the separate existence and operation of each natural law ; the necessity of obeying *all* of them ; and the evident adaptation of all to the moral and intellectual advancement of the race. Religion, as generally taught, presents countless difficulties and contradictions, and there is no moral philosophy in existence that can pretend to a character at once practical and scientific. The separate operation of the natural laws appears to me to remove the obscurities from the one, and to give a scientific character to the other. Before I saw these principles the moral world appeared to my mind like a chaos—something like what the physical world must have appeared to reflecting men before the discoveries of Kepler, Galileo, and Newton.

Now, I perceive as clear and well-defined a government in the moral as in the physical world. Farther, until the principles unfolded in the 'Constitution of Man' be taught and acted on, it appears to me that mankind will never assume their true station of rational beings—that is, of beings who modify their conduct systematically to adapt it to external nature, and who act in correct anticipation of the result of their measures. I repeat that if all this is the dictate of self-love and vanity in me I am in the wrong, and it is right to neglect my production. But on the other hand, if I am in the path of nature, and have unfolded the true theory of the moral government of the world, it would be a benefit to society to let them know what had been done. I am induced to express myself thus freely to you on account of the immense power which you wield over opinion; and because many persons who have studied my book thoroughly, and whose understandings are entitled to respect, have assured me that they have found in it the light which their minds anxiously inquired after, but could never previously discover, respecting the moral government of the world. I do not ask you to write any answer to these observations. They are meant as mere notes for your consideration."

He had a conviction that the conductors of the press having in ignorance created a prejudice against phrenology, were afraid to remove the prejudice because it would involve the acknowledgment of their own error. Therefore he urged on Robert Chambers the necessity to undeceive the people, believing that they were "able and willing to stand a far greater measure of truth if told in sincerity and affection, on this and every other subject," than they got credit for.

The year 1833 was one of happiness to Combe. Phrenology had made rapid strides in public estimation; the French consul had applied for information to enable him to report to his Government as to its progress; and there was some prospect of a professorship of the science being instituted in the University of Paris; many of the private teachers of anatomy in Glasgow and Dublin, and several in Edinburgh, now introduced it into their courses as the true physiology of the brain. His chief work, the "Constitution of Man,"

although ranked by many people with the productions of Paine and Voltaire, was not only growing in its influence upon the English and Americans, as indicated by the sales in these countries, but was penetrating the minds of the peoples of France, Sweden, and Germany through the medium of translations into the respective languages of these countries. In addition to these sources of happiness he had married a lady of whom he was able to say—"Our feelings and perceptions are so truly in harmony that one would think we had been bred together during life. This is the result of similarity of combination of brain. Her anterior lobe is large; her Benevolence, Conscientiousness, Firmness, Self-esteem, and Love of Approbation are also amply developed; while Veneration and Wonder are equally moderate with my own. It is too soon to boast, but I have a full conviction that our happiness will be permanent, and I reckon myself to have set a practical example of my philosophy in marrying such a woman. She is very quiet in company, and requires to be intimately known to be appreciated."

CHAPTER XII.

1834-1836.—DOMESTIC ARRANGEMENTS—THE “SCOTSMAN”—THE LONDON “COURIER”—HIS POLITICAL VIEWS—CHURCH AND STATE—CONTINENTAL TOUR—CHARACTERISTICS OF THE DUTCH, GERMANS, AND SWISS—GERMAN TRANSLATIONS OF HIS WORKS—THE FACTORIES ACT—PHRENOLOGY—LECTURES—NEWCASTLE-ON-TYNE—THE ABERDONIANS—THE CHAIR OF LOGIC IN THE EDINBURGH UNIVERSITY—DR NEILL AND PROFESSOR DUNCAN—REVELATION AND NATURE—LOGIC AND PHRENOLOGY—RETIRING FROM THE LEGAL PROFESSION.

After his marriage Combe directed his domestic arrangements on the same principles which had so materially conduced to the happiness of his bachelorhood ; that is, every item of expenditure was calculated so that it should afford the largest amount of comfort, whilst the total was kept well within the average income. His whole aim was to secure for every one around him as much gratification as was compatible with his means and with the duties which every man owes to himself and to his fellows. He allotted ten per cent. of his income to charitable purposes ; but when occasion arose he exceeded that proportion, and he always dealt with the amount at his disposal so that—as far as he could judge—the most needy should benefit most. He invariably declined to subscribe to any fund which was not to be of advantage to all persons, of every religious denomination. He was tolerant to every sect, because he had a deep respect for every sincere conviction, however false it might appear to him in the light of his philosophy. Although bigotry of any kind, in religion, philosophy, or science, was extremely repugnant to his nature,

he pitied the bigot without condemning him. But he would not give any support to charities or movements which were conducted only for the benefit of a sect. In charities he gave all that he could afford to those who were rendered necessitous by circumstances; and in popular movements he was eager and untiring in his efforts to promote those which promised to benefit all classes irrespective of creed. The deep interest which he took in humanity at large was only an extension of the anxiety which he felt for the welfare of all his kin—and he reckoned that he had about 250 relatives. From his early years he had watched with pleasure or with pain the success or failure of his brothers and sisters; and afterwards, nephews, nieces, and cousins found their place in his consideration. But whilst kinship had the strongest hold upon him, it never interfered with his readiness to serve those who had no other claim upon his attention than that they had been unfortunate. In social disputes his aid was constantly sought by his large circle of friends, and he never rested till he had cleared up whatever misunderstanding existed. However dear the friend or relative he never hesitated to speak the truth, and he had the reputation of being able to say the most severe things without offending those to whom they were addressed.

The winter of 1833-34 was satisfactory in every respect to Combe: his home was made happy by his wife; the Doctor had so far recovered that great hopes were entertained of his being able speedily to resume the practice of his profession; and the lectures were successful so far as numbers could indicate success. Combe wrote to a friend in April 1834:—

“ Phrenology advances here rapidly in the humbler grades of the middle rank. The philosophers of the old school and the religious combine to denounce it in the higher, and it scarcely gains ground amongst them, except with the young. My position in this city is curious. I am constantly meeting the professors and the *literati* in society, and several of them visit me; yet phrenology is as carefully avoided by one and all of them in conversation in my presence as if it were the

subject of a monomaniac's craze. The medical students are rapidly coming round to study it."

Mr Charles Maclaren, when sending a cheque, said—
" Thanks for your articles, which have invariably the merit of being excellent in themselves, and appropriate to the character and object of the paper."

The following reply will show the spirit in which Combe contributed to the *Scotsman*.

18th March 1834.—MY DEAR SIR,—Nothing could be more handsome or gratifying to me than your letter of 17th March ; but you greatly overrate the value of my contributions to the *Scotsman*. I cannot accede to the proposal of receiving £50 per annum as a general fee, because it would lay my conscience under obligations which would be troublesome to me and not profitable to you. I am perfectly satisfied with our past arrangement, and have kept an account of my articles without finding the labour of doing so at all troublesome. The full value of my labours in 1833, including editing and every other trouble, is only, by my reckoning, £30, and I therefore return £20, and give you my best thanks for your generosity. To be paid by the column, and to be left at entire liberty to write only when inclined, is the only arrangement suitable to my faculties. The payment is sufficient to cast the balance in favour of exertion when I find matter in my mind worth publishing, while it is not so large as to stimulate avarice to produce columns when no ideas are in store. By limiting my reward to the actual work performed, my conscience is habitually at ease ; which it would never be were I receiving a fixed fee. Do, therefore, allow me to go on as in time past, and I shall be most happy. I would rather do you a service, if there were any inequality in the value given and received—which there is not—than be haunted by the impression that I was doing you injustice. Mr Stuart [*London Courier*] stipulated for half-a-column twice a-week, and I felt that I could make him certain of this ; and his higher profits enable him to pay better. I therefore took his slump sum without hesitation, believing that I should do more than he stipulated for ; besides I left the bargain open on both sides to be cancelled on a week's notice in case he was not satisfied. Your circumstances and his are therefore entirely different, and his is no rule for your conduct. I am glad to learn from him

that my articles suit him. His paper appears to be coming round to the side of the dissenters more than it did."

The arrangement with Mr James Stuart, the editor of the London *Courier*, referred to in the foregoing letter, was made in February 1834. It was proposed to Combe that he should act as the Edinburgh correspondent of the paper; before accepting the offer he stipulated that the work to be done should not interfere with what he desired to do for the *Scotsman*, and he gave a clear statement of his own principles, so that there should be no misapprehension of the point of view from which he would write of current events.

"My sentiments are Whig, and I am very much in favour of the present ministry; but in many points I go farther in favour of the people than they in their public measures can venture to proceed, but not, I hope, farther than, in their hearts, they would wish to advance. My view of human nature is that men require, 1st, knowledge, and, 2d, training of their moral and intellectual faculties, before they can be trusted with power or be made the arbiters of their own destinies with advantage to themselves; but I believe that men *collectively*, when enlightened and trained, will go right and promote their own happiness; and hence that all churches and oligarchies that pretend to reign over either the minds or properties of mankind permanently ought to be overthrown, but *not till the people are rendered rational* by the means foresaid. I therefore advocate very liberal sentiments, as principles to be ultimately carried into practice, but am moderate as to the time and means."

He saw that the public mind in Scotland was largely occupied with the question of established or voluntary churches, and he desired to be at liberty to treat the subject from what he believed to be the right side, for he said, "I cannot write with vigour what I do not heartily believe to be true and sound." Regarding the position of the church, he wrote:—

"It is notorious that this country, I mean Britain, is overrun with fanaticism and disgraced by bigotry, which the people in their ignorance call religion. Their sects are innumerable, and their disputes endless; but all have one common character, that

of exclusive pretension to be the favourites of heaven, and, with few exceptions, of attaching much more importance to belief than practice. It is equally certain that the great body of educated men are either Deists or Unitarians, but publicly profess some one or other of the popular forms of moral belief through fear of the fanatics and the people whom they carry in their train. Many men on the Liberal side of politics, who are now ranting in favour of the church, are well known, when out of power, to have regarded her as a great incubus on the public mind. What is the cause of their change of language? They are afraid that the people are about to run loose into wild and untried theories of government, and consider the church as a strong bridle in their mouths, which they desire to pull. As reformers, they assumed that the people were rational beings, and that they would (after several oscillations perhaps) go right in the end. They desert this principle in conceiving the church necessary as a bridle. If they would act consistently they would put the curb of reason and real religion on the public mind, and thereby guide it. At present they aggravate the evils they seek to avert. I do not mean that the ministry or the *Courier* should embark headlong in an assault against the church; but I mean that enlightened men should be consistent.

“When out of power they thought the church an ancient incumbrance on the human intellect. If they would tacitly act on the same principle when in power, they would strengthen their own hands and do infinite good. Instead of becoming the apologists and defenders of the church, let them proclaim neutrality, and the resolution to maintain it only as long as the majority of the wealth, intelligence, and virtue of the nation considered that it ought to be supported. Let them encourage free discussion of all its imperfections. By this means they would gradually loosen the strongholds of fanaticism. If the people once formed the habit of thinking rationally about one set of religious forms and opinions, it would be a great step towards their doing the same on others. What is wanted in this country is the explosion of the fanatical interest in points of faith, and the substitution of a practical Christian spirit in its place—the love, for the terror of God; and the love of man, for the fear of the devil. Every measure which would foster this change, and enlarge the rational faculties of the people, would add to the security of the Government and the prosperity of the State, while nothing will weaken the ministry more than a defence of opinions and forms which reason is deserting. They will

appear hollow and insincere, and lose the confidence of the thinking portion of the community.

“ In the *Scotsman* Mr Maclaren and I have gone greater lengths on the subject of religion and the church than any other periodical writers here, and *without giving offence*; because we have never declaimed but uniformly stated principles undeniable in themselves, and reasoned calmly but closely and earnestly from them. It is such writing that produces effect. It affords materials for thought, and brings round men’s minds insensibly. You may through time, and by dexterous use of reason, convince men collectively of almost everything that is really right, and induce them at last to embrace it and act upon it, and a newspaper that aims at permanent success ought to be conducted on such principles. I have no wild theories about the perfectibility of human nature, but great confidence in its capabilities of gradual improvement, and I conceive that all sound reasoning and really good writing must proceed on this assumption as a first principle. It requires the overthrow of all parliamentary creeds.”

He proposed to Mr Stuart that in order to obtain the freedom which he felt necessary to the production of useful work he should contribute anonymous letters on religion and education, to which the editor of the *Courier* might attach a note disclaiming the views expressed in them if that course should appear advisable. This course was adopted, and for several years Combe contributed to the paper on these conditions. He did not consider himself a good newspaper correspondent, because, he said, “ the tendency of my intellect is to go to first principles and reduce everything to simplicity, whereas a talent for magnifying ordinary affairs into topics of importance is essential to a good newspaper writer.” His articles, however, possessed the higher qualities of earnestness and clear judgment in dealing with the leading events of the day.

In July 1834 he started with Mrs Combe on a Continental tour, which was the first of a long series of annual excursions, made for the purposes of enjoyment, and of observation of the religious, educational, and criminal conditions of other

countries. In this first excursion he made several interesting phrenological observations.

“In Holland the coronal region, and the organs of the domestic affections are large, and one sees everywhere cleanliness, order, and propriety One sees the women and children everywhere in company with the men—in their boats on the rivers and canals, on the streets; and on Sundays family groups abound in all the fine walks. In ascending the Rhine we find a race with large propensities, good intellectual organs, but a flat and shallow coronal region. This is the development common at Cologne, and there dirt, poverty, and disorder appear conspicuous. The expression of countenance is harsh and cold; whereas the Dutch looked bland and cheerful. At Frankfort-on-the-Maine a better tribe appears with higher physical comforts. But the most striking example of the connection between the development of brain and physical condition presented itself at Bühl in Baden, on the confines of the Black Forest. On a Sunday we saw a religious procession composed of at least 200 young women, with heads uncovered, and the hair all smooth down off the coronal and intellectual regions, and knotted up behind; of 30 or 40 matrons; and of 150 men of all ages—all bareheaded and moving very slowly. We placed ourselves a little above them, and saw the whole pass by. There was a great deficiency in the moral organs generally, except Veneration, which stood higher than the others; the intellect was only moderate, and the propensities large. The head rose high above the ear, but very little above Cautiousness and reflection. The people looked extremely ill; there was scarcely a well-made man or handsome woman among them; there was a poor, wretched expression in their countenances; many were deformed; and their houses and dresses all bespoke a low mental condition. They appeared to be of another race when compared with the Dutch. On entering Switzerland we have observed the coronal region increasing, and we are among a cleaner, more intelligent, and more moral people. These facts, taken in connection with the deficient brain of the native Irish which I have seen, force on me the conviction that human happiness and the development and activity of the moral organs are inseparably connected. We are sadly in the dark regarding the causes of the differences. At Heidelberg I was told by Professor Arnold that he had read the German translation of my ‘System,’ and was convinced of the truth of

the three great regions—animal, moral, and intellectual—although he could not yet distinguish the particular organs. He had a cast and was studying. He had lent the book to the superintendent of the lunatic asylum, who had reported several cases to him in exact accordance with the remarks in my book.”

Professor Arnold, whilst admitting the three leading principles of phrenology, did not admit the particular organs. Combe found that the professor did not examine the head by manipulation, and said that—“No man can obtain individual conviction of the organs unless he manipulates.” This was addressed to Dr Hirschfield, the translator of the “System,” who desired to translate the “Constitution of Man” also. On this subject Combe expressed himself with characteristic honesty.

“I should be glad if you were to translate my work on the ‘Constitution of Man,’ but I fear that it would not sell; or rather I may warn you that it will either not sell at all, or sell very slowly. The English edition was printed 1828, and it is not all sold even now, although it consisted only of 1500 copies. Still the sale has gone on steadily, and next winter I shall print a new edition.* It has shared the same fate in Paris, in which city a translation has been published. I hear that only a few copies have been sold; but the translation has not been noticed in any of the leading journals. I shall be anxious to hear from you what reception the ‘System’ has met with from your countrymen. In America two editions have been very successful.”

The excursion embraced the most interesting parts of Germany and Switzerland, and Combe was able to say—“We have not had a bad day, nor any sinister accident or incident, and have enjoyed ourselves extremely, for all which we offer to Providence the thanksgiving of grateful hearts.” Of his wife he said—“We have been thrown constantly together day and night since we left home, and often in circumstances a little

* See pages 262-3, foot-note, for the dates of the various editions.

trying to the temper, and I return with an increased impression of her excellent qualities and an unabated affection—for I have been very fond of her from the first.” Expressions like these occur frequently in his journals and letters; the strong attachment which they indicate continued to the last, and this statement will render any further general reference to the subject unnecessary. Another subject to which, during the period dealt with in this chapter, he repeatedly recurred was the desire to write a work on moral philosophy. The idea was growing in his mind, although it did not find complete expression until some time after.

The questions of education and the condition of the operative class occupied much of his thought at this time. His views on the former subject have been already explained. In regard to the latter he was distressed to find that the operatives were opposed to the new Factory Act for limiting the hours during which children might work, and the regulation of the age at which they might be employed in factories.

“If the Act were repealed,” he wrote, “would not the leisure for educating the children be destroyed? If it be continued in force will the suffering which it creates to the operatives in consequence of the want of the wages of their younger children not be temporary merely? That is to say, if they will only submit to the present privations, the demand for labour will increase so much in proportion to the supply that they will get as much money for their own labour and that of their elder children as they would obtain for the labour of the whole family, young and old, under the former system. In short, the Factory Act seems to me to have diminished the supply of labour in a market in which it was redundant, and of course this ought to have benefited the labourers as a class.”

When Mr Thomas Wyse, M.P., was about to introduce to Parliament his Irish Education Bill (1835), he sought Combe's advice as to the best means of improving the existing system of education. A parliamentary committee having been

appointed to inquire into the subject, Mr Simpson was requested to give evidence before it. Mr Simpson, Mr Charles Maclaren, and Combe carefully discussed the questions involved, and the first named, who was imbued with Combe's theories, was before the committee for seven days, his examination lasting four hours each day. Writing to Mr Wyse, Combe said :—

“ Mr Simpson is in possession so fully of all detailed suggestions which I could offer, that I have really no means left of rendering you any efficient aid.

The only point on which I need at all trouble you with remarks is one which is perhaps more philosophical than directly practical ; it is this. The grand obstacle to a national system of education comes from the side of religion. It is said that no sound education can be given which is not based on religion ; and when we ask for the religions to be used on that basis, every sect presents us with its own peculiar dogmas—not these precepts and principles which it holds in common with all Christians, but those which distinguish it from all other denominations of believers,—and hence the impossibility of rendering any religious education national. I have reflected on the cause of this proceeding, and it appears to me to resolve itself into an entire ignorance of the mental constitution of man, and in particular into a complete scepticism in regard to his possessing native moral and religious sentiments. In books on moral philosophy, and in works on divinity, some authors *deny* conscience as a native principle ; others deny the *tendency to religion*, and others deny *benevolence*, as instincts of human nature. They recognise self-love and intellect as the only two principles that can be safely relied on as a basis for education. Now, they produce the Bible, and say that in this book which God has inspired His chosen servants to write, He commands you to fear Him,—to love your neighbour, and to do justly,—and that if you shall fail to obey, He will punish you in eternal flames, while if you do as He commands, He will reward you with eternal felicity. According to their view, this comes home at once to the only two principles of the human mind which we know for certain to exist ; and if you omit this method of implanting moral and religious principles, you have no security whatever that the child shall not grow up utterly blind to the distinc-

tions between right and wrong, and reckless of all restraints on the indulgence of his passions.

“Their conclusions would be irresistible if their premises were sound; and the real difficulty which liberal men experience in endeavouring to found education on a right basis lies in the different views which each opponent in his own mind entertains of human nature, without reducing his objections to the form of a proposition reaching back to this point. A difference of opinion on this subject is actually entertained, is implied in all the arguments used, and influences every conclusion arrived at, although almost nobody states it, or goes far enough back in his analysis of the subject to discover at what point the difference between him and his opponents commences. To apply this to your object,—I would ask the witnesses what faculties they conceive to be inherent in the human mind—and you will bring out the fact of a total lack of opinion, or at least of consistent opinion on this subject; and the source of the vast differences as to practical details will then become apparent. No man capable of reasoning who admits sentiments of benevolence, veneration, and justice to be constituent elements of mind, as certainly as self-love and intellect, can consistently oppose the cultivation of these principles by means in which Christians, Mahomedans, and Hindoos might all join with benefit; in respect that piety to God, and justice and kindness to men, are virtues all the world over; and no man who admits these principles to be inherent could say that a child who had received such instruction to an adequate extent was sent into the world without morals or religion, and left a prey to every passion and seductive influence of vice. If a witness denied the existence of original moral and religious sentiments as instincts in man, he might be completely stultified in all his conclusions; because neither revelation nor any other instruction could in that case be understood or take effect, any more than music could be taught to a man who had no natural perception of melody. Excuse me for dwelling so long on this abstract proposition. I fear the day is still distant when you could avail yourself practically of such views as I now in all humility suggest; yet until they are acted on, there will be only a rickety fabric without a solid and consistent foundation. Nevertheless, if we cannot obtain all, this is no reason why part should not be accepted, and I by no means undervalue *any good*—however far short of perfection—that can be accomplished in the way of education.”

His views on this and other subjects were listened to with

respect by a mass of the people who were most affected by the laws which he advocated or opposed. His voice had become a power ; and from all quarters of the kingdom he received applications to lecture ; but he was compelled to decline all except the two which fell conveniently in October and in April. Sir George Mackenzie was so impressed by the influence of his friend's labours that he proposed a public demonstration in favour of phrenology. To this Combe replied on 15th October 1835, writing from Newcastle-on-Tyne, where he was lecturing :—

“ I do not think that any general public demonstration in favour of phrenology would succeed in Edinburgh this winter, because we have really nobody to make it. Dr Welsh, Mr Scott, and all that class would absent themselves, and then, with the exception of Mr Simpson and Dr Gregory, we have nobody who can speak ; and besides we want weight in pomp and circumstance to produce an effect there.

“ My idea is that monthly meetings of the Phrenological Society, open to the public, as they are in Dublin, and devoted to popular elucidations of the science for the public, might succeed and do good. In Dublin they announce their meetings in the newspapers, and collect great crowds. This keeps the subject alive. I think that there is a great deal of practical wisdom in your proposal of a triennial celebration of Drs Gall and Spurzheim, open to all phrenologists, and I am ready to second this with all my might.

“ I regret to differ from you in regard to the discussion of religious questions in the journal. My idea is this—that no discussion can either safely, consistently, or advantageously be admitted which has not a direct reference to the organs. If you will read my Review of Dr Wardlaw's “ Christian Ethics ” you will find that I adventure neither on propositions nor arguments beyond the organs and their functions. We may go a great way in this line without compromising ourselves, because we are able to take our stand on facts, and our opponents cannot get off by arguing from Scripture texts on abstract principles. Some readers who are annoyed by the article in question have proposed to answer it in the Journal ; and the reply has been “ by all means do so, but keep to the organs and their functions ; deny some facts or adduce others, but

do not give the facts the go-bye and fly to Scripture texts." "This gave them check-mate at once. They intended to give a purely theological answer, and gave up when they were restricted to facts and their direct consequences. Now, I regard this line of argument as fair and philosophical; but we must abide by it ourselves, and not attack any doctrine on mere speculative grounds, or grounds of general reason; for in that case we could not consistently reject speculative answers, and these lead to no good."

I have given six lectures on phrenology here, which are attended by all that the lecture-room will contain, said to be 300 and 20 standing. I have given three lectures on education at 12 o'clock noon, which have been a complete failure. Only 15 attended, and I gave up the course yesterday. I find the intellectual condition of the audience here lower than any I have ever lectured to. Out of the 300 apparently one-half are very intelligent, and the rest ignorant. This ignorant section laughs in the silliest way at facts of the gravest importance, *e.g.*, at a man stealing after being trepanned at the organ of acquisitiveness, &c. It is not a laugh of contempt, but of foolish wonder, although they have heard five lectures on the influence of the brain on the mind."

In connection with these lectures he mentioned the following facts, for the guidance of his friend the Rev. J. P. Nichol (afterwards professor of astronomy in the Glasgow University), who was in treaty with the directors of the Newcastle Literary and Philosophical Society for a course on astronomy. The society paid Combe £100 for sixteen lectures of an hour and a half each, delivered on four evenings of the week. This was double the amount they had ever given before; but they received about £70 for tickets sold to non-members, and drew on an average £2, 2s. each night from occasional visitors, so that they recovered the cost of the lectures from outsiders, and the members enjoyed them free of charge. In addition, 31 new members were enrolled during that month, four being their average increase in the same period.

During the winter of 1835-36, he delivered his course

on moral philosophy, founded on phrenology, in the large Waterloo Room, Edinburgh, to an audience of about 500. This was a special gratification to him, for he had long desired to express his convictions on this subject to the public. Even now he hesitated to publish the lectures in a book, although they were received with every sign of approval, and were reported in full in the *Edinburgh Chronicle*. In referring to this course he told a friend that he found it the most profitable way of composing books to deliver them first in the shape of lectures ; for—" by reading the lectures over in different seasons one attains a fulness and maturity of thought, expression, and illustration which it is difficult to reach in private study." He was again requested to visit Glasgow ; and Mr James Maclelland, accountant there, who, as an earnest phrenologist and a faithful disciple of Combe's doctrines, founded the secular school in that city, was one of the most active members of the committee formed for the purpose of making all necessary business arrangements. The lectures were delivered in April 1836 ; there was an audience of about 500, and Combe received in money as the clear profits £258, the net drawings from fees for the course at 10s. 6d. each, and payment at the doors, having been £298. In October of the same year he delivered an equally successful course of lectures in Aberdeen, and he gave the following description of the character of the Aberdonians :—

" The general character of the Aberdonians is borne out by their heads. The size is large, the temperament varies much, but the predominating types are bilious nervous and bilious lymphatic. The base of the brain is almost uniformly large, but the coronal region is in general well-developed and abundance of intellect, Individuality, Eventuality, and Comparison being larger than in the heads about Edinburgh and the West of Scotland. Destructiveness, Acquisitiveness, and Secretiveness are very generally large, while Ideality, Wonder, and Imitation are very generally deficient. Self-esteem and Firmness are large, and generally Love of Approbation is well developed. This description embraces the elements of vigour of mind,

perseverance, independence, solid practical money-making, with an absence of refinement, ornament, and of the ideal in general. There is great reserve in every sense. Secretiveness and Cautiousness, which also are large, render them close, suspicious, and with so many selfish organs somewhat anti-social. They admit this themselves. With vigorous intellects they have no institutions for philosophy or literature except their universities, which are mere schools. They have not a single work of art in the town, except one or two portraits in the assembly rooms. Yet the town is remarkably clean, handsome, and agreeable. It is built of granite, and the people from their solidity, coldness, harshness of feature, and durability give one very much the idea of being composed of granite also. Yet I like them very much. They are observant, reflective, and rational. They are also I think sincere. I have been much amused at their exhibitions in the department of Acquisitiveness. In coming here in the steamboat I overheard an Aberdonian passenger cheapening his dinner with the steward because he had become sick in the middle of it, and had not been able to do full justice to himself. The dialogue was maintained in dead earnest, but in perfect business-like temper, for 20 minutes, and the dispute was not settled. The passenger refused to pay more than a modified price, the steward refused to abate his charge, which was only 2s., and the authorities in Aberdeen were to be called in on going ashore. My 12 lectures were to be given for 10s. 6d., but this was too much to be risked. The committee made the single lectures 2s. each to punish their townsmen for their little faith, and the commotion that the payment of 2s. a night has made, as the attractions were recognized, have been ludicrous. The petitions to reduce the price of the season or full ticket, as the lectures advanced, were incessant, but we turned a deaf ear to them all, and they pay on. They are extremely alive to ridicule, and it appears that no man with the rank of a gentleman would act as my assistant, through fear of ridicule. I have got a workman. They seem afraid to know Mrs Combe or me in private. We have lived in entire solitude with the exception of two families, Mr Pryse Gordon, who has travelled much, and Mr Lewis Crombie, advocate, who is expecting to be made provost. They have called for us and asked us to dinner. The lectures here are made a party business. I am told that only three Tories attend, and the Tory papers are busy refuting phrenology."

The local attempts to disprove the truth of the science only

added to the general interest in the subject, and the lecturer was gratified by seeing crowded and, so far as he could estimate, appreciative audiences. Amongst the numerous invitations to lecture he received at this time was one from Manchester, written by Mr Richard Cobden, which led to a life-long friendship. Combe had read Cobden's "Russia" and found it replete with the same principles which he had endeavoured to expound in the "Constitution of Man." They were drawn together by similarity of principles, and especially by the ambition which each entertained in an equal degree to benefit their fellow-creatures. Mr Cobden explained that in Manchester the Phrenological Society was in a languishing state; the causes were various, but he thought the primary one was the timidity of the leading medical men to openly avow themselves disciples of the science of Gall and Spurzheim.

"But," Mr Cobden added, "phrenology is rapidly disenthraling itself from that 'cold obstruction' of ridicule and obloquy which it has, in common with every other reform and improvement, had to contend against; and probably the mind of the community of Manchester presents at this moment as fine a field in which to sow the seeds of instruction, by means of a course of lectures by the author of the "Constitution of Man," as could be found anywhere in the world. I have not the least doubt (and I would not willingly misrepresent our prospects) that your visit to this town would be attended by more good than has grown out of your labours at Dublin, Glasgow, or Newcastle. The difficulty of religious prejudice exists here, and it requires delicate handling. Thanks, however, to the pursuits of the neighbourhood—to the enlightening chemical and mechanical studies with which our industry is allied, and to the mind-invigorating effects of our energetic devotion to commerce—we are not, as at Liverpool, in a condition to tolerate rampant exhibitions of intolerance here. The high church party stands sullenly aloof from all useful projects; and the severer sectarians restrict themselves, here as elsewhere, to their own narrow sphere of exertion; but the tone of public opinion in Manchester is superior to the influence of either of these extremes. How I pity you in Scotland—the only country in the world in which a wealthy and intelligent

middling-class submits to the domination of a spiritual tyranny."

Mr Cobden invited Mr and Mrs Combe to be his guests during the visit to Manchester, and this act of kindness was especially pleasing to Combe, because he had found his expeditions to strange towns hitherto disagreeable, owing to the discomforts of lodging-houses, and Mrs Combe preferred to endure these discomforts rather than remain alone in Edinburgh during his absence. He informed Mr Cobden that he would be able to lecture in Manchester in April 1837, and expressed his gratitude for the proffered hospitality. At the same time he referred to his own qualities as a lecturer.

"One other point it is proper to explain. I was not educated for lecturing or public speaking, and I have a very broad Scotch accent, with a total absence of grace and eloquence. My qualities are clearness (when my dialect is understood), force of reasoning, and earnestness; and I have hitherto found these overcome all the disadvantages of my defects (of which I am painfully sensible), and render my courses, on the whole, successful."

Mr Cobden drew up a requisition to Combe, which was signed by a large number of professional men and merchants in Manchester, and said that the difficulty they would have to overcome would not be the inducement of people to attend the lectures, but to find accommodation for all who would come forward. April was finally settled as the month for the lectures. In the meanwhile, Combe delivered a course of lectures in Edinburgh in Dr Mackintosh's class room, Argyle Square, open to students and the male public. He was disappointed that his class only numbered about 21 at first, but it afterwards increased to about 40; this he was told was a fair attendance of students, who were so occupied with the necessary studies of their curriculum that they felt little inclination to give attention to extraneous lectures.

In preparing the second edition of the "Constitution of Man" in 1835 he made many additions, and devoted a chapter

to the subject of the relation between science and religion, which was subsequently developed in a separate book. He wrote very boldly, considering the state of opinion of the community in which he lived, and his secret was this—his own conviction of the truth and advantage of what he taught was very strong, and he endeavoured to make the depth of that conviction apparent on every page, believing that all well-constituted minds would respect a man whom they felt to be sincerely aiming at good although he differed from them as to the means of attaining the object. In doing this he had not been attacked, in the name of religion, by any person of note; a few respectable but timid people were alarmed at his doctrines; but the only evil he had suffered from his outspoken views was a little private abuse. He wrote with discretion, too, as will be seen in his reply to Dr R. Macnish, author of the "Philosophy of Sleep, &c.," to whom, amongst others, he submitted the proof sheets of the new edition of his work, and who commented particularly on the chapter relating to science and religion. Combe said :

"This chapter is the best that I could produce for the multitude. I agree with you that the words of Scripture appear in numerous instances utterly at variance with natural science; but if I had said this I would have put a weapon into the hands of bigotry with which to assail me. I see that the most orthodox interpreters make no account of the words, when an interpretation different from their obvious meaning is necessary for their own purposes; and I think that philosophers have a right to imitate them in this. The New Testament teaches the supremacy of the moral sentiments, and this appears to me to be the true philosophy of morals. That doctrine has really borne up the Bible against all its enemies, and floats it with all the inconsistencies and contradictions to reason and philosophical truth with which it is heavily laden. If, therefore, philosophers could encourage the multitude to interpret freely, so as always to keep the Bible doctrines and natural truth in harmony, there might be a chance of relieving the public mind from the load of superstition and fanaticism with which at present it is cramped, obscured, and oppressed."

To remove, or at any rate to lighten, this load of superstition, Combe devoted himself ; and his labour was effective to a large extent through the " Constitution of Man." The first edition of that work had sold slowly ; but the truths which it expressed had germinated, and from 1835 editions were rapidly multiplied ; the number of copies sold between March 1835 and April 1836 exceeded 19,000. Mr Robert Chambers took great interest in the work : his firm published the people's edition of it at 1s. 6d. a copy, and there is no doubt that he was influenced by the principles expounded in it. One of the signs of its influence was the publication in London of a book called " The Art of being Happy," which was a clear plagiarism of the " Constitution," containing whole pages of the original without acknowledgment. Combe did not attempt to suppress the plagiarism ; he only insisted that the source from which the book was compiled should be recognized in subsequent editions, and this was accordingly done. In another work his " Lectures on Popular Education " were paraphrased, showing that his views were bearing fruit.

The year 1836 was full of interest and excitement to Combe. By the advice of Dr (afterwards Sir James) Clark, Dr Andrew Combe was appointed resident physician to Leopold I., king of the Belgians, and proceeded to Brussels to fulfil the duties of his post ; but owing to the climate being unsuitable to his delicate constitution he was obliged to resign in a few months. The resignation was lamented by the king and queen, who had learned not only to respect but to like him during his brief sojourn with them. Submitting to their persuasion, and to that of Baron Stockmar, Dr Combe remained a little longer than he intended, in order to see if his health could stand the climate ; but he soon felt that his duty to the king as well as to himself imperatively demanded his retirement. He was, however, retained as consulting physician, and made several subsequent visits to Brussels in that capacity and by the invitation of the king. During his stay at the Belgian Court Prince Albert of

Saxe-Coburg (the late Prince Consort) was under his care, and in various ways manifested appreciation of his skill. To George Combe the appointment afforded especial pleasure, for it indicated that phrenology, whether acknowledged or not as an important science, was at any rate no barrier to the highest honours which a professional man could attain.

In April 1836 the professor of logic in the Edinburgh University, Dr Ritchie, intimated to the town council—in whose hands the power of election was vested—that he wished to retire if he could arrange with a successor to pay him a share of the fees till his death. Combe, after consultation with his friends Mr Maclaren, Mr L'Amy and Dr Neill—the latter being a member of the council—determined to offer himself as a candidate for the chair. He first, however, urged Dr Welsh to stand for the appointment, and promised that he would withdraw in his favour and use every effort to secure his election. Dr Welsh declined to offer himself for the chair in the meanwhile, but thought that whatever his ultimate decision might be it should not influence Combe's action. This answer was not satisfactory to Combe, but he acted upon it and at once declared himself a candidate. He had no hope of being successful, but he believed that the mere attempt would attract attention to phrenology, and that the testimonials which he would be able to present in his favour would have the effect of proving that the science had the support of a large and intellectual class of men. There were ten candidates for the appointment, but Sir William Hamilton was from the first the most prominent amongst them, and was in the end the successful one. Combe had no doubt that Sir William would be elected, but he set to work energetically and procured testimonials—numbering about a hundred—from all quarters of the globe, and chiefly from doctors of medicine and clergymen.* He printed and circulated them extensively, a

* The following is a list of the principal writers of the testimonials in favour of George Combe and phrenology as the true science of mind :—

course which raised many objections. Dublin was especially enthusiastic in his favour; he was unanimously elected an honorary member of the Royal Irish Academy; and numerous testimonials were forwarded to him. Writing to his friend,

1. Charles Cowan, Esq., M.D. of Edinburgh and Paris, Bachelor of Letters of the Sorbonne, Elève of the Ecole Pratique, Member of the Medical Society of Observation of Paris, &c., Lecturer on Anatomy, Translator of "Louis on Consumption." 2. E. Barlow, M.D., Graduate of the University of Edinburgh of the year 1803, Member of the Royal College of Surgeons of Ireland, Fellow of the Royal Medical and Chirurgical Society of London, Senior Physician to the Bath Hospital, and to the Bath United Hospital, &c. 3. His Grace the Lord Archbishop of Dublin (Dr Whately). 4. Hewett Cottrel Watson, F.L.S., formerly Senior President of the Royal Medical Society of Edinburgh, author of the "New Botanist's Guide," the "Geographical Distribution of British Plants," and other works. 5. Sir G. S. Mackenzie Bart., F.R.S.L., formerly President of the Physical Class of the Royal Society of Edinburgh, and V.P. of the Society of Scottish Antiquarians, and President of the Astronomical Institution of Edinburgh, Fellow and Honorary Member of several scientific and Philosophical Societies in Britain, on the Continent, and in America, author of "Travels in Iceland," of "An Essay on Taste," of "Illustrations of Phrenology," of "An Agricultural Survey of Ross and Cromarty Shires," and of various Memoirs in the Transactions of Societies and Periodical works, and in Brewster's Edinburgh Encyclopædia, &c. 6. Jas. L. Drummond, M.D., Professor of Anatomy and Botany in the Belfast Royal Institution, President of the Belfast Natural History Society, Honorary Member of the Natural History Society of Newcastle-on-Tyne, and of the Cuvierian Society of Cork, author of "Thoughts on Natural History," "First Steps to Botany," and "Letters to a Young Naturalist." 7. V. F. Hovenden, M.A., late Fellow of Trinity College Cantab. 8. Francis Farquharson, M.D., F.R.C.S., Edinburgh, Vice-President of the Phrenological Society. 9. W. A. F. Browne, Surgeon, Medical Superintendent, Montrose Lunatic Asylum, formerly Lecturer on Physiology, &c., and President of the Royal Medical, Royal Physical, and Plinian Societies, &c. 10. William Wildsmith, Member of the Royal College of Surgeons, London, of the Council of the Literary and Philosophical Society of Leeds, &c. 11. Sir W. C. Ellis, M.D., Physician to the Lunatic Asylum for the County of Middlesex. 12. John Scott, M.D., Fellow of the Royal College of Surgeons. 13. Rear-Admiral Bullen. 14. R. Willis, M.D., Member of the Royal College of Surgeons in London, Librarian to the same Institution, and Member of the Royal Medical and Chirurgical Society. 15. Dr Robert Macnish, Member of the Faculty of Physicians and Surgeons of Glasgow, and author of the "Philosophy of Sleep," &c. 16. Robert Ferguson, M.P. 17. The Same. 18. Richard Tonson Evanson, M.D., M.R.I.A., Professor of the Practice of Physic in the Royal College of Surgeons, Ireland. 19. Dr William Gregory, F.R.S.E., Fellow of the Royal College of Physicians of Edinburgh, Member and formerly President of the Royal Medical Society, Corresponding Member of the Société de Pharmacie and of the Phrenological Society of Paris, and Secretary to the Phrenological Society of Edinburgh. 20. J. P. Nichol,

Mr Richard Carmichael, he described the course of events in regard to the election :—

“Dublin has done the cause of phrenology an immense service by this demonstration, and laid me under ceaseless

F.R.S.E., Professor of Practical Astronomy in the University of Glasgow. 21. Captain Maconochie, R.N., F.G.S., Secretary to the Royal Geographical Society of London. 22. Andrew Combe, M.D., Fellow of the Royal College of Physicians of Edinburgh, and Physician in Ordinary to their Majesties the King and Queen of the Belgians. 23. Professor Broussais, of the Faculty of Medicine of Paris; Dr Bessieres, of the Faculty of Paris, Member of the Anthropological Society, author of “An Introduction to the Study of Phrenology,” &c.; M. David Richard, Member of the Society of Natural Sciences of France, and of the Anthropological and Phrenological Societies of Paris; Dr Casimir Broussais, Physician and Professor to the Val-de-Grâce, Agrégé et Professeur Suppléant d’Hygiène to the Faculty of Medicine of Paris, Member of several Learned Societies, and Vice-President of the Phrenological Society of Paris; Dr J. Robertson, Member of several Learned Societies, and President of the Anthropological Society of Paris; Dr Fossati, President of the Phrenological Society of Paris, Member of several Learned Societies, formerly Clinical Professor, and Director of several Italian Hospitals; M. Bouillaud, Professor of Clinical Medicine to the Faculty of Paris; M. Turpin, Member of the French Institute; M. Jules Cloquet, Professor to the Faculty of Medicine of Paris, and Surgeon to the Hospital of the Faculty of Paris; M. Sanson (Ainé), Professor of Clinical Surgery in the University of Paris, and Successor to the Baron Dupuytren as Surgeon of the Hôtel-Dieu; M. Peltier, President of the Society of Natural Sciences, and Member of the Philomathic Society; M. Frederick Leo, Paris; Dr Ferrus, Physician to the Hospital of Bicêtre, Professor of Clinical Medicine on the Diseases of the Nervous System, &c.; Dr Joseph Vimont, of the Faculty of Paris, Honorary Member of the Phrenological Societies of London, Edinburgh, Boston, &c., and author of a “Treatise on Human and Comparative Phrenology”; Dr Gaubert, Ex-Professor of the University of France, Knight of the Royal Order of the Legion of Honour, Principal Editor of the Journal of the Phrenological Society of Paris, Member of the Anthropological Society, &c.; M. Dumoutier, Anatomical Assistant to the Faculty of Medicine of Paris, and Honorary Member of several Learned Societies; and Dr Felix Voisin, of the Faculty of Paris, Physician to several Hospitals of that City, Founder of the Establishment at Vanvres for the Treatment of the Insane, and Founder of the Orthophrenic Establishment. 24. Extrait du Discours prononcé à la Séance Annuelle de la Société Phrénologique de Paris, par M. le Professeur Andral, Président, Professeur à la Faculté de Médecine de Paris, Titulaire de l’Académie Royale de Médecine, Membre des Sociétés de Médecine de Bogota, d’Edinbourg, &c., et Médecin de l’Hôpital de la Pitié, Médecin Consultant du Roi, Chevalier de la Légion d’Honneur, &c., Avril 1835, (Published in the “Journal de la Société Phrénologique de Paris). 25. Dr W. F. Edwards, F.R.S., Member of the Institute of France. 26. Alex. J. D. Dorsey, Master of the English Department in the High School of Glasgow. 27. S. Hare, Proprietor and Medical Attendant

gratitude. The discussions about the testimonials and the logic chair that are going on here are intense and multifarious, but they are all in private circles. I have stunned the press, and except two papers, the *Scotsman* and *Chronicle*, that advocate my cause, the others are all silent, but the under-current of debate runs strong. I hear contradictory accounts every hour,—now I have no chance—next I have no rival.

of the Retreat for the Insane near Leeds. 28. Dr William Weir, Lecturer on the Practice of Medicine at the Portland Street Medical School, Glasgow, formerly Surgeon to the Royal Infirmary, and one of the Editors of the "Glasgow Medical Journal." 29. Dr Robert Hunter, Professor of Anatomy and Physiology in the Andersonian University, Glasgow. 30. Alexander Hood, Surgeon, Kilmarnock. 31. John Miller, Surgeon, Kilmarnock. 32. Dr J. S. Combe, Member of the Royal College of Surgeons of Edinburgh. 33. George Salmond, Procurator-Fiscal of Lanarkshire; Walter Moir, Sheriff-Substitute of Lanarkshire; and Mr D. M'Coll, Governor of Glasgow Jail. 34. Dr John Mackintosh, Surgeon to the Ordnance Department in North Briton, Lecturer on the Principles of Pathology and Practice of Physic, Fellow of the Royal College of Surgeons of Edinburgh, Member of the Medico-Chirurgical and Wernerian Natural History Societies of Edinburgh, of Montreal, Heidelberg, and Brussels. 35. Andrew Carmichael, M.R.I.A., Dublin. 36. Dr John Elliotson, F.R.S., President of the Royal Medical and Chirurgical and of the London Phrenological Societies, Professor of the Principles and Practice of Medicine and of Clinical Medicine, and Dean of Faculty, in the University of London. Senior Physician of the North London Hospital, Fellow of the Royal College of Physicians of London, formerly Physician to St Thomas's Hospital, and President of the Royal Medical Society of Edinburgh, &c., &c. 37. James Simpson, Advocate. 38. The Honourable D. G. Hallyburton, M.P. for Forfarshire. 39. William Hunter, A.M., late Professor of Logic &c., in the Andersonian University, Glasgow. 40. Alexander Mackintosh, Surgeon Superintendent Dundee Royal Lunatic Asylum. 41. Robert Chambers, one of the Conductors of "Chambers's Edinburgh Journal." 42. Charles Maclaren, Editor of the *Scotsman* newspaper. 43. Letter from George Salmond, Esq., Procurator-Fiscal of the County of Lanark. 44. William Hunter, Town-Clerk, Forfar, and President of the Forfar Phrenological Society. 45. David Murray, Physician in Forfar. 46. Alexander Smith, M.D., Physician in Forfar. 47. John F. Allan, Licentiate of the Royal College of Surgeons, Edinburgh. 48. The Honourable Judge Crampton, formerly Fellow and Professor of Law in Trinity College, Dublin. 49. The Rev. Dr Francis Sadler, S.F., Trinity College, Dublin. 50. G. Otto, M.D., Professor of Medicine in the University of Copenhagen, Physician to the Civil Prisons, Member of the Royal Board of Health, and of the Medical Societies in Copenhagen, Edinburgh, Stockholm, Paris, Mountpellier, Berlin, Leipzig, Lyons, &c., &c. 51. Thomas Wyse, M.P., Chairman of the Committee on Education in Ireland. 52. James Johnston, M.D., Physician-Extraordinary to the King, Editor of the "Medical Chirurgical Review, &c. 53. The Rev. Dr Sprague pastor of a Presbyterian Church at Albany, New York; and over 40 other testimonials chiefly from medical men in the United States.

The electors very properly preserve silence till the day of election. The most authentic report is that my testimonials are producing a deeper impression the longer they are studied, and that my claims are rising in public estimation. The imputed anti-Christian tendency of the "Constitution of Man" has been one grand rock of offence, but the more seriously it has been examined, the less do they find of ground for this accusation. At last the enemies are driven to attack my personal faith. I am a Socinian and an elder in the Unitarian chapel, according to the bigots. They have gone to the minister of that chapel to obtain a certificate of the fact, to damn my pretensions at once, but to their unspeakable mortification he has assured them that, so far from being an elder, I am neither a member nor a sitter in his chapel. They are at present at a dead stand, for they find that I sit in St Paul's Episcopalian Chapel; and that I observe Sundays so strictly that my clerks never attend on that day, and that all my servants are remarkably regular church attenders. This provokes them excessively, and I do not know what will be the upshot. Within the walls of the college, also, I am told that the ferment is equally strong. It seems that my lectures and writings have already half-ruined the professors of Latin and the teachers of the grammar school. To put me in a chair in the university would be to give a stamp of authority to my doctrines, and it might complete their destruction. They are therefore wroth against me. The professors of anatomy and physiology, medical jurisprudence, natural history, and moral philosophy have hitherto all scouted phrenology, and treated it contemptuously in their lectures. To have me introduced into the university would be a rebuke to them all, and cause them to retract their condemnation, or be laughed at by the students. They, therefore, are equally hostile. All their displeasure, however, is mere froth, for they have no votes. They even feel the wide diffusion and especially the publication of my testimonials as a great grievance, because, whether I get the chair or not, the weight of the authority contained in them is operating as a rebuke of their own conduct, and they are loudly and bitterly abusing me for the "exceeding bad taste" of "selling" my testimonials and pushing them all over Britain. My answer is that only those who grant the certificates have any right to complain concerning the use I make of them, and all of these rejoice in this diffusion, so far as I know. They relate to a science much more than to me, and in no other way could such a demonstration of its strength be brought forth. As to the "selling" there are now nearly 12 sheet 8vo, which

are retailed at 2s. 6d. or 1s. 3d., to me about 1¼d. per sheet, which does not cover the paper and printing, so that it is in vain to insinuate mercenary motives in me. In short this complaint is one of mere soreness at their effect. I should like to hear whether any of my friends in Dublin are averse to the circulation. In giving you this description of the state of opinion in this city you will understand that I write on second-hand information merely, for none else can reach me, as nobody abuses me face to face. Part of the representations may be false and part exaggerated, but those who bring them to me believed them, and this is all I can answer for. They look like truth, and resemble human nature. They dread me as undermining the influence, which I hope to God I shall be the blessed instrument of doing."

It was thought at first that Combe would not be able to secure the suffrages of even one member of the council ; but Dr Neill, who appears to have been a man of broad sympathies, took up his cause, and only required to be satisfied on good authority that his doctrines were not antagonistic to Christianity. He accordingly submitted the "Constitution of Man" to the Rev. Professor Alexander Duncan,* with the request that he would give him his opinion on this point. Professor Duncan in a long letter explained that he perceived no discrepancy between the fundamental positions or principles of this new science, so far as founded on, or justified by, the phenomena of the human constitution and what he had been accustomed to believe on divine testimony. He gave the following explanation of his own position towards phrenology :—

"While a convert to the science of which he [Combe] is the able and strenuous advocate, so far as I have had opportunity of studying it, my uncertainty with regard to some of his statements connected with theology renders it necessary that I should simply give you my own views ; and by the knowledge you have of the accordance of these with Mr Combe's, you will judge how far he is sound *in my opinion*, and fitted for being an instructor of youth in logic or mental philosophy."

Professor Duncan then proceeded to examine in detail

* Author of the "Origin and Existence of Moral Evil," &c.

several of the theological questions which seemed to be affected by the "Constitution of Man," but he found nothing inconsistent with the true principles of phrenology. He concluded thus:—

"I hope Mr Combe will never perceive anything incompatible with just views of the doctrines of Scripture in the science which he has done so much to elevate to its present state. The phenomena of which it treats are in my view of great importance in mental training, and no more inconsistent with human responsibility, or favourable to materialism, than other phenomena of our physical constitution long known and universally admitted."

The letter was handed to Combe by Dr Neill, and to him the reply was addressed, after mature reflection on the various theological questions involved. As the reply gives a clear exposition of Combe's views, it possesses particular interest.

George Combe to Dr Neill.

"*Edinburgh, May 15, 1836.*—I duly received your letter of the 29th of April, inclosing a letter dated the 28th of April, from the Rev. Professor Duncan to you. I have read both with great attention, and have delayed answering them till now, in consequence of your having intimated that you were then on the eve of setting out for London. Allow me to offer my best acknowledgments to you for the kind and upright motives which induced you to apply to Professor Duncan for his opinion of the relation between my phrenological doctrines and Christianity, and to him for the excellent spirit in which he has answered your appeal. My own views are the following: There are three questions which it is here necessary to distinguish, and to treat separately, viz. :—

"1. What facts and doctrine in phrenology are conformable to nature ?

"2. What are conformable to right interpretations of Scripture ?

"3. What are conformable to the standards of any particular church, the Church of Scotland, for example, or that of England, or that of Rome ?

"I assume it as a fundamental principle, that there cannot by possibility be any discrepancy between real facts in nature, or sound deductions from them, and right interpretations of

Scripture ; because the God of nature and revelation is one ; He is the fountain of truth and wisdom, and His works and word cannot be discordant. In directing my attention, therefore, to nature, I never once imagined that if I discriminated truth I could be deviating from Scripture, nor can I conceive this even now to be the case.

“ I regard revelation as a sacred subject, which ought not lightly to be brought into collision with philosophy. This may be done in two ways—by adducing ill-observed or incorrectly-interpreted natural phenomena as evidence against revelation on the one hand ; or by advancing erroneous interpretations of Scripture as objections against indubitable natural truths on the other. Many sceptical writers have been guilty of the first,—while the Romau pontiff and cardinals who condemned Galileo, and also the religious authors who in our day denounced geology as inconsistent with Scripture, are chargeable with the second of these errors.

“ It appears to me to be more advantageous to investigate nature *by herself first*, and to proceed to compare her phenomena with Scripture only after being certain that we have rightly observed and interpreted them.

“ By this method we shall preserve our minds calm and unbiassed for the investigation of truth ; we shall test nature by herself, which is the proper standard by which to try her ; and we shall avoid bringing discredit on revelation by involving it in unseemly conflicts with natural phenomena.

“ To be able to discover, in a sound and satisfactory manner, the relationship between natural truths and revelation, the investigator should be critically acquainted with both. In reading the attacks made by serious persons who are ignorant of geology against the discoveries made in that science, you must have occasionally been convinced that, in so far as they had the power, they were injuring, while they intended to serve, the cause of religion ; because they were denouncing as subversive of revelation, facts which could not possibly give way before any form of argument, seeing that they were founded in nature. The same error is committed every day in regard to phrenology. Religious persons attack certain statements as false which are indubitably *true*, and only bring obloquy on their own cause when they imagine that they are overwhelming the advocates of the new science.

“ It is rare, however, particularly in the case of a new science, to find an individual qualified by his knowledge of science and Scripture to compare them advantageously. The mind of the successful explorer of nature is generally too

closely and ardently directed towards her phenomena to render him equally clear-sighted and zealous in his interpretations of Scripture. Both objects, therefore, will be better accomplished if he who takes the lead in interrogating nature shall confine himself to that province; and if another individual possessed of a clear, calm, and unbiassed understanding, who has made theology his study, shall follow in his tract,—detecting his errors when he has fallen into any, yet recognizing and embracing all the truth which he has brought to light,—and shall then proceed to compare this truth with revelation, with the single and upright purpose of discovering their harmony.

“Entertaining these views, I have on principle confined myself to the investigation of nature, never doubting that, in so far as I may have discovered truth, Scripture will be found to harmonize with my doctrines. If in any instance I have observed or interpreted erroneously I shall be most anxious, on this being pointed out, to renounce my errors. But I hope it will not be imputed to me as a fault that I have not discussed also the relation of nature to revelation, regarding this, as I certainly do, as more properly the duty of individuals better qualified than myself for the task.

“There is another distinction which is too often overlooked. All Christian churches are agreed in regard to the import and obligation of the moral precepts of Christianity, and it is only touching points of doctrine and church government that they differ. Now phrenology, as a mere human science, comes into direct relationship only with the first—the practical precepts,—and it has generally been allowed by those who have attended to the subject, that no mental philosophy in existence can be compared with it, not only for its exact accordance with this great and important department of Christianity, but for the power with which it demonstrates that nature is framed and adjusted on the principle of enforcing by positive sanctions the scheme of Christian morals.

“I very respectfully maintain, therefore, that phrenology, and the deductions which I have made from it, are in a remarkable degree in harmony with all the points on which the Christian world in general is agreed; and when you consider that the logic chair is one, not of theology but of science, and that, by the constitution of your university, the class may be, and generally is, attended by students professing a variety of shades of doctrinal belief, it may well be doubted whether this certain harmony between the principles of phrenology, and those Christian principles in which all the

students are agreed, be not a decided recommendation of it to the patrons.

“The third question before stated, or the accordance of phrenology with the standards of the Church of Scotland, is the only one that remains to be considered. If there be harmony between the constitution of nature and the doctrines of phrenology, and also between the moral precepts of Christianity and these doctrines, which there assuredly is, it would be strange indeed if discord were discovered between them and sound Christian doctrine. Assuming, then, that the standards are correct deductions from Scripture, it is a fair presumption that they and phrenology do also agree. But as philosophy is addressed to men of every variety of faith, and as I appear before you exclusively as a philosopher, I humbly urge that it is the duty of the divines of each church to adjust the relation between their own standards and any particular philosophical doctrines, if true (and if mine be untrue I shall cheerfully abandon them); and that the members of the Church of Scotland are not entitled to insist on your rejecting my claims to a philosophical professorship, merely because they have not taken the trouble to discharge a duty incumbent exclusively on themselves. I am confirmed in my conviction of the soundness of the course which I have adopted in avoiding all doctrinal discussions in my printed works, by a fact which cannot be generally known. I have received letters from several excellent and ingenious friends, well skilled in theology, on the relation between doctrinal Christianity and phrenology, reconciling them, but no two of them agree in the manner of doing so. Each proceeds, according to his individual views of Christianity, and according to his individual cast of mind. Professor Duncan’s views, although highly ingenious, differ from them all. This satisfies me that the time is not yet come, and that the men have not yet appeared, for doing justice to this great subject; and perhaps they will not arrive until both revelation and phrenology shall have been contemplated under broader and stronger lights than are yet possessed; and which, I cannot doubt, will at last bring them into complete harmony. Any attempt on my part, therefore, to enter on this question at present, would prove unsatisfactory to myself and unprofitable to the public. Probably a report from a committee of first members of the church, after phrenology shall have been fully studied by them as a science, will be necessary before the public mind will be thoroughly satisfied on the subject, and I should allow such a committee several years for deliberation. But this affords no

reason why the progress of truth should be arrested in the meantime ; why a doctrine founded in nature, and admitted by many sound theologians to be undeniably in harmony with practical Christianity, should be excluded from your university ; and why I should be held forth as an enemy to religion merely because certain of those who take an interest in that sacred cause have not yet found it convenient to study the two subjects, and deliberately to compare them. If I advance only doctrines founded in nature and in accordance with Christian morality, I am entitled to the benefit of the presumption that they are also in harmony with all sound doctrinal interpretations of Scripture. If any of my views are at variance with nature or Christian morality, I am ready to give them up.

“ You are aware that my works on phrenology have obtained a very extensive circulation in this country, in America, and on the Continent, and that my lectures have been numerous and respectably attended. Is it credible that I can have been teaching doctrines hostile to Christianity, and yet have been thus cordially received ? I very respectfully maintain, and you as a phrenologist are capable of judging of the point, that my whole doctrines are much more obviously in accordance with Christianity than the philosophical theories of Mr Stewart and Dr Brown, which are not generally objected to by the Christian public. In my ‘System of Phrenology,’ in particular, which contains all the principles of the science that would be embraced by the logic chair, there is not a view that any reasonable Christian can object to. And I am ready to pledge myself, if this should be any satisfaction to the patrons, not to go beyond the contents of that volume in teaching logic on phrenological principles in the university. They have a guarantee for my sincerity in this assurance, in my offer to resign the chair on their requisition to do so. To you who understand phrenology, I need scarcely add, that the very clearness of the light which it throws on the human faculties, their objects, and applications, would afford no small security against any professor abusing it in teaching dangerous doctrines ; it would enable the students instantly to detect, to expose, and refute the errors of their master. Allow me, in conclusion, to draw your attention to the fact, that the late Rev. Dr Andrew Thomson attended a course of my lectures on phrenology in 1822 or 1823, and survived the publication of ‘The Constitution of Man,’ a copy of which I presented to him, for nearly three years ; and although he conducted the *Christian Instructor*, and was a zealous, ready, and powerful writer,

vividly alive to the purity of the faith which he espoused, yet he never published a word against that book. I sat for several years in his church, and was personally acquainted with him, and yet I never received even any private remonstrance from him on the subject. Further, Dr Chalmers published his 'Bridgewater Treatise' several years after my work had appeared, and although the subjects in his book and mine are closely analogous, he has stated no objection whatever to my views, which is quite inconceivable if he had regarded them as dangerous and unfounded in nature, and been prepared to refute them. Now, I very respectfully submit, that it would be unjust to presume against me, without evidence and without argument, that my facts and deductions are erroneous and at variance with Scripture, and on this presumption alone to exclude me from the logic chair. Instead of enjoying the natural presumption of innocence, which is allowed even to malefactors, until they be proved to be guilty, the rule is proposed to be reversed in my case. Some religious men contend for my exclusion on the bare possibility that I may, after the matter is investigated, be found to have committed heresy. They urge my exclusion without any responsible accuser having appeared against me, without a trial, and of necessity, therefore, in opposition to justice. I can only appeal to the common sense and good feelings of mankind against such proceedings.

"I observe a work by Mr Scott of Teviotbank in opposition to 'The Constitution of Man' announced as preparing for publication. But I can hardly anticipate that he will consider himself called on to supply the *supposed* omissions of the two learned doctors of divinity above named. If, however, I shall be mistaken in this, and if Mr Scott shall make any attempt to show that my work contains doctrines inconsistent with the principles of sound Christianity, it will be sufficient for me to remind you and the public that Mr Scott is a layman, that he enjoys no reputation for theological learning, and that his opinions therefore are not of authority to decide the question. Besides, you are well aware that Mr Scott strenuously opposed the views contained in the 'Constitution of Man' when they were discussed in the Phrenological Society prior to their publication, and that the public voice in this country, in America, and on the Continent has pronounced an opinion of the work widely different from that entertained by him."

Professor Duncan's letter and the foregoing answer were printed, and, with some additional testimonials to the merits

of phrenology and Combe—chiefly from America—were presented to the Lord Provost and Town Council. Combe also wrote a second address to the Provost explanatory of the relationship between logic and the science of mind as explained by phrenology. But the walls of the town were placarded with bills proclaiming an exposure of the unchristian principles of the “Constitution of Man,” and the newspapers contained advertisements of Mr Scott’s refutation of Combe’s work, with proofs of his inconsistency. “These sweet manifestations of Christianity,” Combe said, “have lost their interest with me. If the chair had run within one or two votes I might have been anxious about their effects; but as things have gone they are harmless.” He stood almost alone in his attempt to secure due recognition for the science he espoused; in his native town there were few to encourage him in the effort he was making, or even to speak a kind word to him, whilst bigotry and prejudice assailed him on every side. The narrowness of the mental qualifications of those who possessed the power of election to the chair will be understood when it is mentioned that Sir William Hamilton was also charged with infidelity, although by a small number of the council. There was much excitement in the city; no one expected Combe to succeed; and it has been already shown that he had no thought of success himself—but the mere fact of his appearance as a candidate was startling to many, and the production of a whole volume of testimonials from men of undoubted respectability and many of high attainments in science perplexed his opponents, and disturbed their previous conviction of the absurdity of phrenology. Several newspapers supported his claims, amongst them the *Spectator*, *Courier*, and, as was to be expected, the *Scotsman* and the *Chronicle*. The election took place on the 15th July. The debate in the council was a stormy one, and characterized by anything but philosophical temper on the part of most of the speakers. Ultimately Sir William Hamilton was elected by 18 votes to 14 given for Mr

Isaac Taylor, the author of numerous metaphysical works. On the following day Combe wrote to a friend:—

“I expected only Dr Neill and Mr Milne (who is a leather merchant, a friend of my late brother Abram, and a man of a calm, clear, decided, and very liberal mind) to support me; but they were joined by Mr Dick, Professor of Veterinary Surgery to the Highland Society, a man of some attainments and originality. The election of Sir William Hamilton was carried entirely by the Whigs bringing their political influence to bear in his favour. The church supported Mr Taylor and Mr Macdougall, so that I was left to the care of reason and of truth alone. Every effort was used to prevent my success. The professors stormed at the very idea of it, abused me, and canvassed and wrote letters in favour of Sir William Hamilton. The partizans of the church published scurrilous and contemptible pamphlets, and in private the tongue of religious bigotry was fierce against me. The clergy preached and railed against me. As an example: Mr Chambers was requested a few days ago to show his steam-printing press to a party of ladies, and one of them took up a sheet that had just issued from it; when she saw that it was the ‘Constitution of Man’ she threw it down as if it had been a serpent, and exclaimed—‘Oh, Mr Chambers, how *can* you print that abominable book? If you had only heard our minister on it last Sunday night you would have burned it!’ Nevertheless Mr Chambers proceeded to print an additional 5000 copies, making 17,000 of the people’s edition, and 6000 of the 12mo edition, in eighteen months.”

Combe was well satisfied with all that he had done in offering himself as a candidate for the chair of logic, notwithstanding the storm of abuse which it brought upon him. He sought to exalt phrenology, and to a large extent he had succeeded. His pecuniary interests would have induced him to decline the chair, even had it been placed within his reach, for its emoluments were at that time only £500 a year (after paying £100 a year to the retiring professor), and he would have had to give up twice that sum from his profession.

The result of the election did not in the least disturb him, and on the day after it took place he attended an examination of the

brain and skull of a gentleman who had been a distinguished linguist and an ambassador of England at various courts, but who for fourteen years previous to his death saw spectres, knowing them to be illusions, and during the last four years of his life entirely lost the use of language.* Combe at once sought in this case the proofs of the effect of disease on the organ of language, and discovered that there was a small cavity in the left corpus striatum, about an inch back from the organ, into which there had been an effusion of blood ; this being absorbed lined the cavity—about a quarter of an inch in diameter—“with a yellowish membrane. The right hemisphere was entire. The brain presented appearances of general chronic inflammatory action.” On the 22d he started upon an excursion with Mrs Combe through the Highlands, and on his return on 22d August applied himself to his multifarious occupations with undiminished vigour.

The year 1836 had been so far the busiest of his life : he had composed and delivered the greater part of his lectures on moral philosophy ; stood candidate for the logic chair and brought forth his volume of testimonials, which involved an enormous correspondence ; lectured in Glasgow and in Aberdeen ; brought out new editions of his “System of Phrenology,” 993 pages 8vo ; of his “Outlines,” “Elements,” and “Constitution of Man ;” besides writing articles in the *Phrenological Journal*, *Scotsman*, *London Courier* ; and was in the winter lecturing to Dr Mackintosh’s students and preparing a new edition of his “Popular Education.” In addition to all this he had continued to prosecute the profession of the law, and did not neglect the interests of his clients. He now came to a resolution which he had long meditated and long yearned to be able to make, namely, to retire from his profession, and to devote the remainder of his life to study

* The case is that of Sir Robert Liston, and is fully reported in the *Phrenological Journal*, x. 382, and commented upon in the “System of Phrenology,” ii. p. 139, fifth edition.

and to the propagation of phrenology. On this important subject he wrote to his friend Mr James L'Amy:—

“ EDINBURGH, 16th November 1836.

“ MY DEAR SIR,—As you are one of my kindest and best and steadiest friends, I think it due to you and advantageous for myself to communicate to you first, before doing so to any other person, except my brother and my own family, a change of life to which I have all but made up my mind. Between Mrs Combe's fortune and my own accumulations we shall have a free income of £800 a year, although both of us were laid on our backs. My lectures and books during the last and a few preceding years have yielded from £200 to £300 more on an average. I calculate, therefore, that from this source we may expect to draw in future at least £200 a year while my health and strength continue. Now £1000 a year for two persons like us, of moderate habits, not given to ostentation, and without a family, appears to be a very reasonable competence. The practice of law, for the sake of making an addition of £500 a year to this income, which we do not spend, and which, therefore, we would only accumulate for the benefit of our executors, has not so many attractions as it presented when it was necessary for independence. I am therefore strongly disposed to leave it off.

“ I am led to the same determination by another motive. Phrenology is obviously advancing, and my influence on opinion and reputation are increasing with it. I am only a few weeks past forty-eight years of age, and with care and obedience to the laws I may reasonably look forward to ten or fifteen years of usefulness yet to come. I feel my own deficiencies in scientific knowledge, however, more perceptibly the farther I advance; and I am anxious, while it is not yet too late, to complete some important parts of my own education, so that I may be fit for any destiny that may in the course of events open up to me, and also be more capable than I at present am of taking my place among men of scientific attain-

ments. I could not accomplish this object if I continued in the law. By giving it up I could devote two or three years, partly at home and partly on the Continent, in studying phrenology, anatomy (human and comparative), geology, and some other branches of science which I could turn to account. These studies would afford me ample occupation for some time, and afterwards, between lecturing, and composing for the press, and study, I see before me an active and pleasant prospect of life. Finally, it is the opinion both of the Doctor and myself that I should probably be more appreciated in Edinburgh after leaving it for a time; and with the exception of the society of a very small circle of truly excellent and attached friends, and my family connections, I have no motive for remaining here, while I have many for departing. My present idea is to give up the law at the end of the year.

“I have been anxious that Robert Cox should first become a partner with me, and then take up the entire business, and I have offered to continue for a year or two to introduce him fairly into my place; but he, after very long deliberation, and in opposition to all our wishes and counsels, declines this proposal, and has resolved also to abandon the profession. He has a small patrimony, which he thinks, with his habits and tastes, will render him moderately independent, but we look on his determination as proceeding from a somewhat morbid state of his nervous system, such as often affects young writers at his age, when the responsibilities and labours of the profession open on them in their full magnitude, before they have had experience of their own strength and abilities to sustain them. We have represented this to him, and given him months for reflection, but he remains firm in his intention; and I mean, therefore, to withdraw and merely recommend Mr Robert Ainslie, to whom I will intrust my own affairs, to such of my clients as may ask my advice about a new agent.

“As no person whatever out of our own family knows

anything of these views and resolutions, I am still open to advice, and if you shall have any counsel to offer, I need not say that it will be received with great gratitude and respect ; and due consideration will be given to it before a public announcement is made."

Mr L'Amy agreed that the resolution at which Combe had arrived was under the circumstances a sensible one, and wished him good speed in the new life upon which he was about to enter. Accordingly the necessary arrangements were made, and at the close of the year 1836 Combe ceased to be a practitioner of the law. The following words, addressed to a friend without immediate reference to the step he had now taken, will appropriately conclude this portion of his life:—

" I was born with a rather feeble constitution ; I was given up by the doctor when two or three years of age ; hovered on the verge of the grave (but upborne by activity of brain) during infancy and youth ; grew stronger at manhood ; and at forty-eight, after becoming acquainted with and observing the natural laws, I am free from all complaints, happy, active, and comparatively vigorous, with the internal consciousness of having my foot more firmly planted on the green turf of life than at any previous period of my days."

