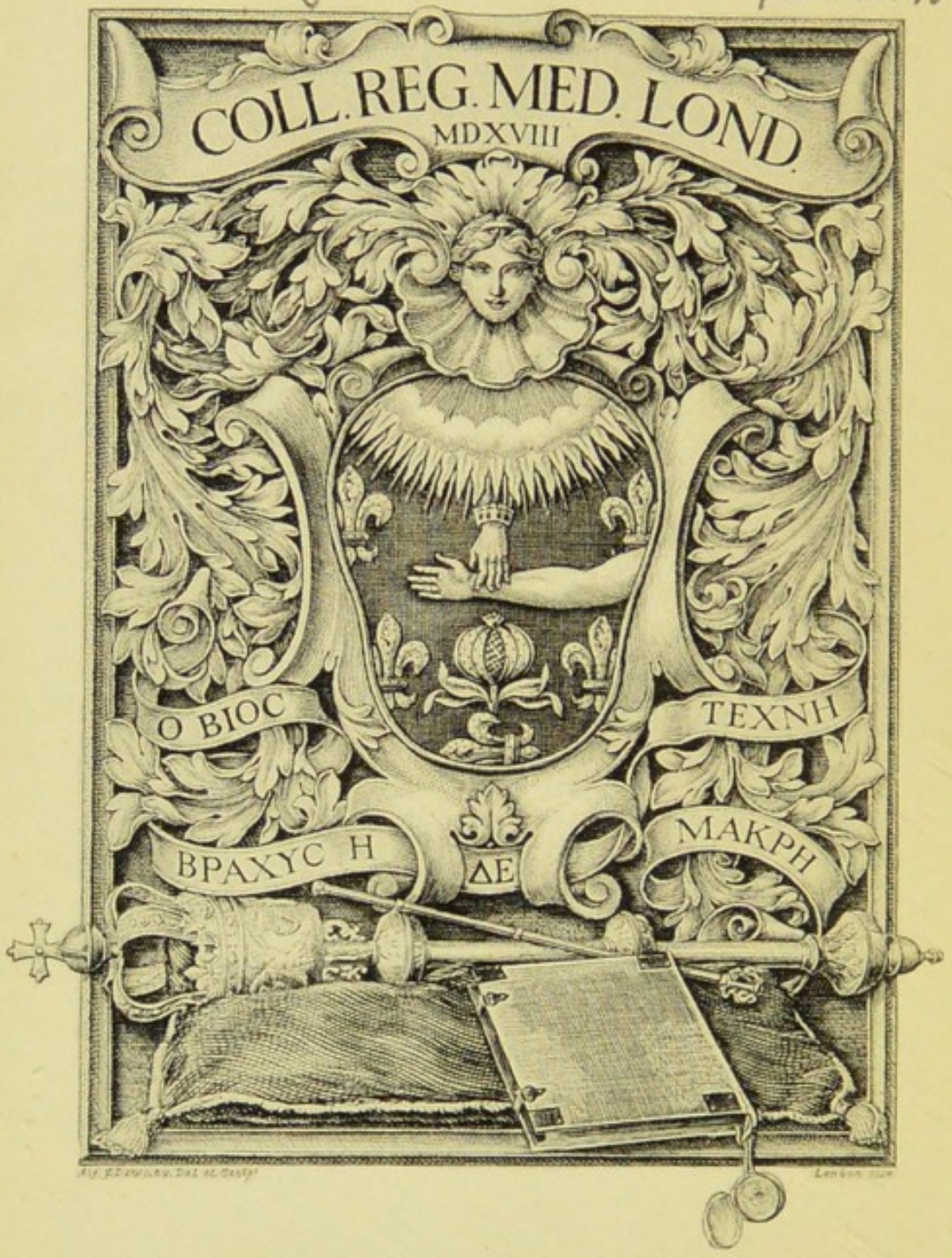
A sketch of the life and work of Robert James Mann, M.D., F.R.C.S. / by his wife.

A Sketch of the Life and Work of Robert James Mann

M.D., F.R.C.S.



for Mr. Wheatley
with very kind regards.
August 1888

A SKETCH

OF

THE LIFE AND WORK

OF

ROBERT JAMES MANN

M.D. F.R.C.S.

BY HIS WIFE

PRINTED FOR PRIVATE CIRCULATION

1888

" As sometimes in a dead man's face,
To those that watch it more and more,
A likeness, hardly seen before,
Comes out—to some one of his race :

" So, dearest, now thy brows are cold,
I see thee what thou art, and know
Thy likeness to the wise below,
Thy kindred with the great of old.

" But there is more than I can see,
And what I see I leave unsaid,
Nor speak it, knowing Death has made
His darkness beautiful with thee."

—*In Memoriam.*

A SKETCH

OF

THE LIFE AND WORK

OF

ROBERT JAMES MANN

THE following sketch of my husband, Robert James Mann, is drawn up in the belief that his life and character were marked by aims and qualities which deserve some record, and in the anticipation that it may be welcome to at least a few of the friends who knew and valued him most. For the testimony borne by them, since his death, to their high appreciation of the fine and attractive qualities of mind and heart which characterised him, allows me to think that they may be interested in knowing how these were displayed and exercised throughout life, and in making full acquaintance with a career that was conspicuously active, useful, and disinterested from first to last.

As my husband and I were strangers to one another until three years before our marriage, I can speak of

his early life only as he used to tell me of it; and have deeply to regret that I trusted to memory many particulars, which I now recall too uncertainly to be able to make use of them. I can give, therefore, but a very imperfect picture of his early years. He was born in Norwich on the 5th of January 1817. When he was about three years old his father died of consumption, at the age of thirty-three; and his mother, with three other young children besides himself, was left in straitened circumstances. In consequence of these, Robert James, the only boy of the family, was taken by a married sister of his father, who had recently lost her only child, to be brought up by her and her husband. It was owing to this that his childhood and boyhood were passed chiefly in London, where these relations then resided.

Here, in due time, he was sent as day-boarder to a school, in which the Latin master was the only teacher of any attainment or special fitness for his work. What learning was to be picked up under such circumstances he no doubt appropriated, as I still possess a medal which was awarded to him after an examination of the pupils of the school at Christmas 1828. It could hardly have been otherwise in his case, for the love of knowledge was strong in him from a child. He seemed scarcely to remember the time when he had not a passionate love of books and a passionate longing to possess them, and by their means to become his own teacher. His little moneys were hoarded to obtain these

coveted treasures, which had to be looked at and desired many a day before they could be claimed as his own. His aunt was an able, intelligent woman of fine character, similar, judging by his descriptions of her, in many respects to his own; but her life had to be devoted to practical matters, in which books had but little place. The uncle, her husband, was still less of a literary turn; so the studious child grew up in a home where there was nothing to foster the innate tastes and propensities of his nature. But it was a home which fostered the other good qualities his after life displayed. His aunt won from him the love of a true son. He never spoke of the treatment and training she gave him but in terms of reverent affection and gratitude; and even far on in his life he could not refer to her and her relations to him, without strong emotion.

He never attended any other school but the one just spoken of, nor had any other teaching but his own, until his entrance at University College, London; and yet by that time he had made considerable acquaintance with natural history, especially botany, also with geology, and some of the physical sciences. Electricity early attracted him, as he used to speak of an electrical machine he made for himself when a boy. It is plain, therefore, that he must have studied diligently and continuously by himself; though, to my vain regret now, all that I learned from him as to how and when so much knowledge was acquired, is summed up in the ceaseless craving for books I have already mentioned,

and in his eager, careful reading and analysing of their contents when obtained. Where these were concerned with science, they were taken into his mind once and for ever. Indeed, on looking back upon all I remember to have heard him tell of himself in early life, it seems to me as if science had become part of himself from the time he began to have any acquaintance with it—that the facts and laws of Nature were no sooner known than he assumed a relation to them personally which made them as closely interesting to him as are the facts of their own experience to most individuals. I am perhaps only stating what is the recognised normal condition of the scientific mind; but to myself, whose mind is not of that quality, he seemed to possess a remarkable and enviable power of making the truths of natural science as real to himself as are to me the facts of self-consciousness.

Soon after he was in his teens, the uncle and aunt changed their home from London to Norfolk (to which county they, like their adopted son, belonged), fixing it first at Great Yarmouth, and then near Norwich, in the suburban village of Thorpe. The move to this last place must have been made in or by the year 1834, as in that year the first step in his education for the profession, that of medicine, which it had been decided that he should follow, was made, by apprenticing him to the surgeon of the Norwich Dispensary. In this institution he worked daily during the first three years of his apprenticeship, and attended there occasionally

for another six months, until, in September 1837, he entered himself as a student at University College, London, and began his first medical session there. He studied under such eminent professors as Liston, Elliotson, Williams, Sharpey, Lindley, and others. In his second session he came out eighth in honours in the class of Midwifery, and in a letter to his sister wrote "I had not a single two-years' man ranking above me;" fourth in the class of Medical Jurisprudence; and third in Botany in a tie. In his third session, early in 1840, he was appointed dresser at University College Hospital to Liston, from whom he received a certificate that he had dressed for him "for three months with the utmost diligence and regularity." Before those three months were quite ended, in the middle of April, he passed his examination at Apothecaries' Hall, and that he had used diligence in his studies, even beyond his strength, was shown by his becoming seriously ill with fever a few days after. He was delirious, and indebted to the pity and kindness of a fellow-student for what nursing he received, no relation being within reach of him. In about eight days he managed to return home, by taking the steam-packet to Yarmouth, for he was still too ill to bear coach travelling, and he reached Thorpe the last day of April. During the following month a large abscess beneath the lower jaw, a consequence of the fever, interfered with the recovery of his strength. He was barely convalescent when, on the 24th of June, he again made his way to London by water, and on the

26th passed his examination at the College of Surgeons —Sir B. Brodie and Sir A. Cooper being among his examiners. The following day he returned to Norfolk in the same way. I give these dates, taken from a diary of his own drawing up, because they afford an illustration of the courageous endurance of which he was capable, when it was necessary to make exertion in the face of bodily pain and weakness—a characteristic, other examples of which I shall have to mention.

The relatives who had adopted him as their son, were far from rich. They possessed, indeed, little more than a competence, acquired by frugality and careful management on the part of the aunt. The medical education of their nephew was therefore a matter which could be accomplished only by the continued practice of the same methods. Of this fact he was aware to the full, and he ever described to me that the utmost economy had been incumbent upon, and practised by, him. Throughout the whole of his medical education he acted under a fine sense of the duty of avoiding indebtedness from indulgence in self-gratification at the expense of others. He never allowed himself to go beyond a certain outlay in his mode of living, never attempted to delude himself into thinking this or that extra was necessary, because it would have been acceptable as a matter of bodily comfort. And the same principle controlled him in regard of those intellectual tastes and desires which he cared much more to gratify. I have been so fortunate, since his death, as to come

upon a complete and carefully drawn up statement of the "Total cost of (his) Medical Studies," beginning with the fee for his apprenticeship at the Norwich Dispensary, and ending with that for his diploma of Doctor of Medicine. Subtracting the last, which belongs to a subsequent time, the sum of the whole is £177. £55 of this was expended on the first-named fee; £28 : 10s. on the license of the Apothecaries' Company and diploma of the College of Surgeons; £27 was paid in Hospital fees, and the remainder consists of fees ranging from £2 to £9 for attendance at eleven professional classes. Folded in with the statement is another headed, "Average Rate of Household Expenses for the Week." This begins with lodgings, which were in or near Portland Street, 7s.; goes on with fires, items of food, as bread, meat, etc., and ends with laundress. The sum total of the whole is £1 : 1 : 8! and in a line with these figures is written "99 weeks," being, I conclude, the number during which he was in residence as a medical student. A little over £107 must therefore be added to the already named £177, making the total his relatives had to find for his education in medicine, what I have often heard him state it to have been, under £300. The allowance for the necessaries of life can hardly fail to strike by its spareness; but I know that it was conscientiously and unswervingly adhered to, and with scarcely the sense that it was a hardship; so little was material comfort a foremost consideration, and still more so impossible was it to him to be other

than self-denying in the use of means earned by the industry of others. Had the uncle and aunt been his own father and mother, his conduct, I believe, would have been the same; for the high feeling which puts the interests of others before its own was innate in him, and ruled him here, as it did throughout life. I know of one occasion in which this feeling was specially exhibited and acted on during his medical studentship. Under a false and unjust impression, he was made the subject of a lawsuit, and compelled to meet certain costs in connection with it. The way in which he did so was by reducing the small sum he allowed himself to spend weekly for food, until the amount was paid. As he once said to me, "I all but lived on bread and water to pay it, and did not let my aunt and uncle know about it."

In the autumn after he had become a fully qualified practitioner of medicine, he removed with these relations from Thorpe to Norwich, and there commenced practice by himself, having to rely entirely upon the confidence he might win by skill and assiduity for whatever success he obtained. The leading physician in Norwich at this time was Dr. Lubbock, who achieved a great reputation there, though exciting for a while the strong opposition of other members of his profession by the determination, which he carried out, to practise both as a surgeon and a physician. My husband became favourably known to him, and assisted him in the operations he performed at the private

hospital he set up on being excluded from the Norfolk and Norwich Hospital. The sobriquet for his young friend, by which he signified his liking for him, was "little Mann."

The "little" may have suggested itself to the elder doctor as an appropriate epithet, because of the slight figure and slender limbs, so spare of flesh, of the young one—characteristics which throughout life marked my husband's physique as being the reverse of robust. Indeed, his appearance indicated a liability to the consumptive disease of which his father died; and in 1842 he was attended by Dr. Lubbock for some chest affection, and about twelve years after was found by Dr. C. J. B. Williams to have already impaired lung-structure. But in childhood and youth the want of robustness showed itself chiefly in an inability to sit long upright, with the back unsupported, without pain coming on. He was in consequence, even as a boy, allowed to use an easy-chair, a noticeable fact half a century ago, when it was thought that young spines were strengthened by being left unsupported. But whatever there was of delicacy or deficient muscular fibre in my husband was almost masked, as he grew up, and practically compensated for, by the superabundant energy of his nature and the force and resoluteness of his will. During the years that his home was at Yarmouth and at Thorpe, when he was still in his teens, and in the latter portion of them working at the dispensary, he became a great walker, chiefly through his interest and

eagerness in searching for plants. The study of Botany was a prominent pursuit with him as soon as he could carry it on with individual research. His rambles after botanical specimens would sometimes extend to twenty miles in the day, ten of them perhaps accomplished before breakfast, which would be taken at a wayside inn in some rich floral district. The country between Norwich and Yarmouth, with its marshes and broads, is such, and he became acquainted with all the plants peculiar to it, and gathered and dried them, thus laying the foundation of a herbarium which, by exchange of specimens with other collectors, he ultimately made to consist of nearly all the English flowering plants. And in the same year, 1840, in which he finished his medical education, he furnished a list of the flora of Central Norfolk to the *Natural History Magazine*, then in existence, this being his first appearance in print.

The great hold which botany had upon him at this time, and the interest he took in helping others to a knowledge of it, was shown by his undertaking in 1841 to deliver, at the Norwich Museum, lectures upon this branch of natural history. These were, as far as I know, the first lectures he ever delivered. They were begun early in May, and continued throughout that and the following months. When concluded, they were recognised by the Apothecaries' Company in the following diploma, dated Apothecaries' Hall, London, August 1841: "I am desired by the Court of Examiners of this Society to forward you their recognition

of your lectures as a Professor of Botany, and to inform you that Certificates of attendance thereon will be received by the Court." This is signed by the then Secretary, and bears witness, I suppose, to the completeness and thoroughness with which the lecturer had handled his subject. In connection with the delivery of these lectures, he used to tell how an elderly gentleman, of high standing in both city and county society, who, from kindly interest in his fellow-townsman, attended some of them, was so taken by surprise at his knowledge and his power of communicating it, that from time to time he was driven to use the ejaculation (a characteristic one with him) of " God bless my soul," to express his sense of the degree in which the young man surpassed his expectations.

In the same month in which these lectures were started, my husband was deprived of the good aunt who had been to him as a mother. Her illness began with symptoms of the chest delicacy belonging to her family, such as at once made him anxious about her, and she succumbed to bronchitis, after a few months of failing health, when only 56 years old. I have already indicated how deep was the affection he had and retained for her throughout his life. I may now add that he more than once told me, what he must always have felt the greatest happiness in recalling, that the last words, feebly uttered by her, were addressed to himself to signify the full satisfaction he had given her—that, indeed, he had never disappointed her.

Her death, which was a great loss to him in itself, was the cause of another event of considerable importance to his future career. It removed him in a few months from the city of Norwich—which offered a large field for the exhibition of talent and skill on the part of a young practitioner, such as his intellect and attainments fitted him to take advantage of, and where in the end, therefore, he could hardly have failed to become eminent in his profession—and placed him in the small country village of Buxton. This apparently undesirable change he agreed to at once and cheerfully on finding that his uncle had taken a fancy to a house in the country. He had now in consequence to make a fresh start, and, as previously in Norwich, with nothing but his own ability and conduct to further him in obtaining a practice. By slow degrees this was acquired, with an amount of labour which only they can appreciate who have had intimate or personal experience of a country doctor's life.

Almost at the outset of this second start he was deprived of the other resources on which hitherto he had been able to depend. His uncle died suddenly within fifteen months of the removal from Norwich to Buxton, having during that period altered his will in favour of his own relations. As this had been drawn up in his wife's lifetime, everything was left to the nephew, who was their adopted son, as it might fairly be, since the wife had been the real maker of the little fortune which had been amassed. When, after her

death, the uncle showed a desire to change the disposition of his property, the nephew offered no resistance to his following his inclination. The result was that his death left the latter with a legacy of £100 and the furniture of the house he inhabited, as the only portion he was to possess; while to him came the work of dividing the rest of the property among the individuals to whose benefit it had been diverted. This, which would have been a cruel disappointment to many men, and to him was a serious deprivation of a source of comparative independence which he had till lately looked upon as a certainty, affected him most as being the withdrawal of the fruits of his aunt's industry and able management from the purpose to which she had destined them, and which when dying she believed would be fulfilled. Great, he knew, would have been her distress could she have been aware that the nephew, whom she loved as a son, and for whom she hoped to have earned what would secure him a sufficiency to live upon, was not to possess this advantage. An advantage he was sure to have turned to good account. Though my husband acquiesced in the old man carrying out his wishes, he could not but often revert in after life to the effect it had upon himself in withdrawing the means of following and obtaining the intellectual pursuits and possessions which he most prized. He had not even the satisfaction of being able to think that his loss was a real benefit to those who had gained by it. To all appearance the reverse was the case.

Side by side almost with his start in medical practice in the country, he may be said to have made a start in promoting the scientific knowledge of the neighbourhood; for I find the first entry in a diary for 1842 to be—"This spring commenced a course of general lectures at Buxton." That is, within a year of taking up his residence there, he was making himself known as a missionary of science. Such, I should think, in a quiet country place, some forty years ago, must have seemed the action of volunteering to inform and enlighten its inhabitants on scientific subjects. It proved the means of bringing him into notice, and of introducing him favourably to some of the best families of the vicinity. Yet it was not, I am sure, undertaken with this object, but out of a genuine love for and interest in science; in that which, because it afforded so much delight to himself, he believed must have similar attractions for others. But though thus disinterestedly purposed, it was a just as well as a necessary consequence that the act should further his professional success. To the most intelligent and educated families around him it was a recommendation that he was evidently something more than the ordinary country practitioner. As such he was at once gladly welcomed by not a few, being accepted also in some instances as the medical adviser, and where this was not the case, as a man whose intelligence and attainments made his acquaintance worth cultivating.

The landed gentry of Norfolk have not had the

reputation of being over ready to recognise the worth of intellectual endowments, or to open their houses to individuals, not of their own class, upon the ground of such possessions; but to my husband they must be credited with having shown themselves superior to their reputation. He was doubtless fortunate in having for his more immediate neighbours one or two families whose intelligence and sound feeling placed them above class prejudices, and I think I am right in saying there were points in his bearing and disposition which, no less than his attainments in science, might well commend him to favourable regard. He was never boastful of knowledge, but ever most ready to impart it to any one who showed the least desire to be informed. And he could do so with a fluency and clearness that made those who had once learnt from him wish in the same way to learn again. His interest in, and regard for, science was indeed of so enthusiastic a kind that he never conversed upon it but with an ardour and earnestness such as conveyed the idea of a nature to which knowledge was the most valued of possessions, as well as a source of continued delight. So ready was he to use every occasion which offered to expatiate on the charms of science, on the grandeur and the importance of the facts it dealt with, that his attitude towards it may be said to have been that of an apostle. Such fervent advocacy would to many be an attraction, and still more would the cordial response he always gave to any and every appeal made to him for information, as

if a kindly heart delighted to meet the call for help, quite as much as a clear intellect to unfold and explain what it knew. The characteristic of ready helpfulness here displayed was conspicuous in him, not only in this but in other yet more practical respects, and contributed largely to the formation of the friendships begun at this period of his life, which lasted to the end of it, and, in some cases, as I gratefully experience, have survived him.

The science which took the greatest hold of him after he settled at Buxton, and to the pursuit of which he became henceforth more and more addicted, was that of Astronomy. Indeed it never ceased, I think, to be the one in which he took the greatest delight; and perhaps the highest gratification he could have had would have been the means to make it the great object of his life, and to follow it out with continued and systematic instrumental observation. The need and the desire for instrumental help in pursuing it were so strongly felt that in 1844, in spite of his limited means, he made himself the possessor of a telescope. This was an iron reflector, with which he had to be content until, two years later, he was able to replace it by an achromatic refracting one; or rather to obtain such piecemeal. For he bought a $2\frac{3}{4}$-inch object glass, and had it fitted into a wooden tube bound at the ends and elsewhere with metal rings, the whole made in the village under his direction and supervision. In order to be able to turn his newly acquired treasure to

the best account, he opened first a trap-door in the roof of his house, and next erected a wooden equatorial stand in his garden.

In the rough observatory which the first-named arrangement supplied, he was now, on all possible occasions, busily engaged sketching the craters in the moon, and subsequently carried on the same work by means of the yet more exposed equatorial stand. And this in the depth of winter; in doing which he experienced a remarkable illustration of the power of mind over body. He had so feeble a circulation that, after drives of many hours in an open gig during winter time, such as his profession made necessary, he sometimes lost sensation in the fingers, and faintness was produced, followed by acute pain in the arms as the circulation was returning. This faintness once or twice occurred suddenly, to the great alarm of those at hand, and, by the time I knew my husband, he was in the habit of using every precaution to avoid it. But, when engaged with his telescope on frosty winter nights, he would for hours at a stretch watch the moon, making drawings of it at the same time, and never lose feeling out of his fingers! As the result of these prolonged observations, he obtained a large number of drawings of the craters and markings on the moon. They were boldly done, and formed a striking series of illustrations. They exhibited also, I should suppose, considerable natural aptitude for drawing, in which art, as far as I know, he never received a single lesson. The series

must have been lost in one of the many removals his effects had to undergo, for I can find no trace of it. After a while he lessened the exposure to which his astronomical work subjected him, by enclosing the equatorial stand in walls. That is, he built himself a rough observatory, a tiny round structure, with a many-sided conical roof, one of the sides of which opened and fell back on the next, the roof itself being made to move round by means of rude but fairly efficient mechanism. The whole was of course deficient in the steadiness and smoothness of working essential to astronomical observations of the first order. But it afforded the means for a gratification of the highest order to the head which designed it. This little observatory went in my family by the name of the "Pepper-pot," which undignified appellation proved appropriate on more accounts than that of shape: for when my husband changed his home from Buxton to Aylsham, it was found possible to remove the structure bodily.

Great as was his interest in science for its own sake, the work of his profession was as sedulously and diligently followed by the young country doctor as if it had been his sole object in life. He could not be careless, or shirk responsibility in undertaking to deal with the delicate and imperfectly known complications of the human organism. What was done in his favourite studies was therefore accomplished by the energy which rose to a corresponding height as their attractions impelled him to their pursuit, and not taken

from the time or the strength which were due to those who entrusted themselves to his medical skill and judgment. He may be said indeed to have had no idea of sparing his bodily strength, as for some years he took his chief daily round on horseback, though physically so unfitted for the exercise that it was apt to bring on severe pain, which had then to be borne for hours. During these years, only when a second round beyond walking had to be accomplished in the day was it made driving instead of riding. I am so fortunate as to be able to give in his own words the views of life which he entertained at this period, a year or so before he and I became acquainted with one another. They are contained in a letter to his sister which she has sent to me since his death. The letter was written in 1845, when he was twenty-eight years old. "So far as my own estimate of life goes, I like it still better than ever. My life is a most exceedingly happy one. . . . My friends are all kinder than ever to me, and make me very happy, but it is the constant recurrence of my mind to beautiful associations within, the constant presence of countless familiar objects of thought that take the place of friends, and never let me know what *ennui* is, that renders my life so thoroughly worth the enjoying. I fancy sometimes that if I grow an older man, and get a better furnished mind, I shall probably lose some of the irritability I have constitutionally—and by then I may be still better known, and get far nearer into that state I should so much delight to

attain—the state of uninterrupted loving and being loved. I think the tone of my mind entirely precludes me from ever, on any account, contracting melancholy. I cannot understand that weariness of finding that life is not worth existing for, and meeting a few transient pains, for to me every minute seems a luxury, unless when fatigued, or listless, or in pain, and then it is afterwards remembered as a delight. No man can be happy unless there is something before him that he holds desirable; the unattained desire of my life is better telescopes, better books, better understanding; all things that are rather infinite than finite. I try to reach, grow weary with the effort, pause, rest, and try again, and this state of things I conceive must continue yielding me luxurious delight until I sink fearlessly and undespondingly into the unknown rest; that, I think, will not bring any other pain than the dislike to part with cherished things, because I feel already as if I have enough to have been worth the living for. I sincerely and earnestly believe that if station, opinions, professional success, had been the things of my struggle and desire, I should now be as dissatisfied as I am happy and contented."

The healthiness and cheerfulness of nature here displayed are surely remarkable. It is, at least, by no means common to find a man, working hard and reaping but a small pecuniary return for his labours, express so unhesitating a conviction of the worth of life, or so unqualified a sense of its enjoyableness; still less to

make the enjoyableness consist in the conditions which are mentioned. And yet these expressions were no mere words, but represented realities which his whole life was to demonstrate; as, from soon after this date, I can bear witness that it did. If the buoyant cheerfulness and overflowing delight became less buoyant and less overflowing as years went on, they did but gain in strength and intensity. As difficulties and disappointments met him in his onward path, as the continued struggle for a sufficiency of ways and means at times pressed more and more heavily upon him, there was no change in the spirit of not only brave but cheerful resolution with which they were encountered. Each circumstance that life brought was taken as a fresh call for the exercise of this spirit, and not as a ground of complaint against life itself. And there never was a time when the same keen relish for all things that are rather "infinite than finite" was not uppermost, or when "that weariness of finding life not worth existing for," which he could not understand, became a personal experience with him.

In the year the letter was written from which the above extract has been taken, he made his first independent venture in literature. His favourite science lured him to the attempt, and he called the small volume he now published, *The Planetary and Stellar Universe.* It was dedicated by permission to the then Bishop of Norwich, Dr. Stanley, from the "desire" (to use the author's own words) "to express the sincere respect with which your

many efforts to advance the cause of human intelligence are viewed by one of the humbler votaries of science," and with "the aim of inducing a few additional minds to entertain the elevating and refining influences inseparable from astronomical pursuits." The prefatory notice states that the little volume owed its existence to a series of lectures delivered "during the leisure of a professional life to a small circle of intelligent friends." It thus proves that astronomy was included in the course of general lectures which he began soon after coming to Buxton.

This notice is dated October 1845. It was early in 1847 that I first saw him who was to be my husband, and, rather characteristically, my first sight of him was lecturing at the Norwich Museum on "The Jaws and Teeth of Quadrupeds." I was already living in the same neighbourhood, the death of my father, who was a clergyman, having obliged my mother, in the previous year, to change our home, which she fixed at Aylsham, a small town within a few miles of the village of Buxton. But up to this time I had not even heard his name, and had no idea who .the lecturer was who handled his subject so clearly and fluently. But a few months after thus seeing and hearing him, I and my family became aware of his being in our neighbourhood, and began both to hear him spoken of and to meet him. Before the end of the year our meetings had resulted in his being aware, as well as myself, of the feelings we entertained for each other, and, soon after the opening

of 1848, we became engaged. But the engagement, owing to pecuniary objections on the part of my family, was shortly afterwards set aside; that is, we neither met nor had any communication whatever for several months. Permission to resume it was obtained before the year was out, though our marriage did not take place until the 1st of October 1850. From the time, however, that our engagement was again recognised and sanctioned, we met constantly, and not only I, but my sisters also, profited by frequent intercourse with one so ardent for knowledge and so willing to help others to acquire it. If we sought information on any matter of science, it was at once given to us orally, and perhaps carefully written down afterwards that we might go over it by ourselves. Sometimes, too, illustrations, which it must have cost him much time to contrive, were prepared for our benefit. Many years after, I came upon an enlarged representation, still in good preservation, of the human larynx, which he had made of cardboard, using twine for the vocal chords.

During the year of our interrupted and then renewed engagement, he wrote and published a second little book, this time on a subject connected with elementary chemistry. He called it, *Air, the Food as well as the Breath of Life*, an ungainly title, which he subsequently changed for *The Atmosphere, its Properties, Composition, and Relation to Animal and Vegetable Life*, hardly better in sound, though preferable as expressing the contents and object of the work. The preface says

that it "professes to be the first of a little series of similar treatises." This one is dated July 1848, and the date shows that at the time he was having personal experience that "the course of true love never did run smooth," he took to increased mental occupation and in a new direction, as an antidote to painful and depressing circumstances. My subsequent knowledge of him enables me to assert that in no other way was he likely to meet this or any other trial life might bring. He was both too courageous and too ready to accept trouble as inseparable from human existence to waste his energies in fruitless complainings or unmanly despondency.

The little treatise did not prove to be one of a series, though the subjects of which it treated were taken up, as will be seen, in a different form subsequently. For the present astronomy became again the moving power of his pen, and in 1850 he wrote and brought out a small pamphlet, which he called *The Achievements of Sidereal Astronomy in the Middle of the Nineteenth Century.* The title showed that he had been led to the production of its pages by a glowing sense of the grandeur of these achievements and of the facts revealed by them. The little volume was memorable to me as being the first that brought me into contact with proof sheets, with which I was from this time to make large acquaintance.

The year before our marriage he changed his home from Buxton to Aylsham, the latter place having, through the removal to it of the Union Workhouse, to which he had been surgeon since 1843, become more

convenient and desirable for his professional work. The last months of his residence at Buxton were marked by a sudden and severe outbreak of Asiatic Cholera in that and the adjoining parishes. The disease proved rapidly fatal in some instances, and in all, as far as I can remember, he attended the sufferers single-handed. He had for some weeks most arduous and anxious work in his combat with the fearful malady, the source whence it originated in this instance being also specially investigated by him, together with the local circumstances that increased its intensity in the spots where its fatal power was most developed. He received warm and able non-professional assistance from the families of the friends who were resident in the infected parishes, and escaped untouched himself. Some years after, he assisted his old teacher and friend, Dr. C. J. B. Williams, in bringing out the third edition of his *Principles of Medicine;* and at pages 76 and 77 of this work there is a passage between brackets and italicised "Note by Dr. Mann," which states the hypothesis as to the origin and development of this formidable disease, which he formed from his observations of it during this particular outbreak.

Life with a country practitioner I soon discovered to mean an amount of hard work, day after day, and often in the night too, such as I had not before realised to be the lot of other than the so-called labouring man. And yet, as I knew even before our marriage, this hard work did not by any means embrace the whole of my

husband's industry and activity. Often, after a day of heavy professional rounds, followed, as they always must be, by the tedious, often prolonged, work of dispensing medicines, he would, if the sky were clear, or some object in the heavens to be specially observed, repair to his little observatory to encounter fresh muscular fatigue; for his "Pepper-pot" had none of the luxurious contrivances of a regular observatory. Never was it more true that "change of work is as good as play" than in his case. When the telescope followed the surgery, he would stand and stoop and crouch, lift and turn and swing this and that, with the eagerness and alacrity of a man fresh from rest, rather than of one who had been engaged in continued exertion of mind and body throughout the day. He seemed to lose all sense of fatigue when occupied with what gave him such genuine and profound delight as did the observation of objects in the heavens.

His spare time and energies, however, were from this time more and more devoted to the use of his pen, chiefly, no doubt, from natural inclination, but partly also with the hope that literary work might bring some addition to an income which medical practice, with his moderate views of professional remuneration, did not suffice to make a large one. The little volumes he had already published were ventures of his own, the first having been with a London house, the two others with the Jarrolds of Norwich, and were, as might be expected, no gain to him pecuniarily. He now sought to connect himself

with some of the serials of the day, and succeeded in the case of *Chambers's Edinburgh Journal*, to which for some years he was a rather frequent contributor, furnishing, between 1851 and 1859, as many as thirty papers. These were all on scientific subjects, or on novel inventions, discoveries, and enterprises. In the former of these years he was occupied with yet another work on astronomy, having determined to write such a sketch of the science as might be used in schools or by students endeavouring to be their own instructors. It was called a *Guide to the Knowledge of the Heavens*, and was arranged, for facility of use in teaching, on a plan he again adopted in another work. The then usual one of question and answer was abandoned, and that of giving each statement or proposition in one type, and enlarging and explaining it, when necessary, in another and smaller, was followed. This educational book was published by the Jarrolds in 1852, under the terms of a royalty, and the firm, particularly its leading spirit, Mr. Thomas Jarrold, from this time evinced great interest in the work my husband was proposing to himself—that of producing simple yet sound text-books of science for the use of teachers and students. The Jarrolds, indeed, soon after took up, on their own account, the idea of popularising science, and showed a very laudable ambition in the matter. Their aim was not only to bring out books for schools, but even to introduce some knowledge of scientific truths among the higher artisan and labouring classes. I remember conferences between my

husband and Mr. Jarrold, in which plans for his own projects and for those originated by the firm were discussed and brought into some definite shape.

Only the Astronomical Guide had been published, when a great change came in our life and prospects. In the summer of 1853 my husband decided that some delicacy of the chest I had shown in the previous winter made it undesirable that I should again pass that season in Norfolk. To have adopted the plan of going south for the winter, and returning to our old home for the summer, would have necessitated a paid substitute to take charge of my husband's practice during our absence. He determined, therefore, to give up his present practice altogether, and to throw himself upon the resources of his mind and the work of his pen for the means of livelihood. This was, doubtless, a rather venturesome act; but it never occurred to me for a moment that it might be a rash one, so entire were my belief and confidence in the industry and force of will, as well as in the intellectual grasp and attainments, on which he relied. While venturing on the hazardous step, he always kept clearly before his own mind and before mine too, that if he could not make it answer as he hoped, he must resume the practice of his profession and take any amount of the hardest work that might be necessary to win him a livelihood in it. A probability that, after the step had been taken, I could not think of, or hear mentioned, without tears coming to my eyes, so keenly did I realise in the retrospect how arduous and beyond his

strength had been the work which, as a country doctor, he had had to endure.

The same winter that had brought him alarm about my health had in reality told as heavily on his own; for during the whole of it he suffered more or less from boils on the hands and arms, which made the exposure to cold in long drives in an open vehicle more trying for him than ever. He would return sometimes from his daily round of visits all but fainting from pain, borne for hours without any means of relief, and without the support of food. It had appeared to me, as well it might, a serious thing to be the cause of withdrawing him from the practice of his profession, and putting upon him the anxiety of finding a livelihood in other and less certain ways. Yet the first winter after our removal showed him to be, though released from dangerous exposure and bodily fatigue, so below par in health and energy, that there seemed good reason for me to rejoice in what I had brought about. I remember that he never contradicted me if I said that he could not have stood another winter of his work in Norfolk, but let me infer, though he did not exactly say so, that he knew it would have broken him down, in all probability, past recovery. Therefore, the step, so venturesome in one respect, may have been safety to him in another; and even as to the risk involved, the result justified the confidence which he had in himself and I in him. One of the friends of his Buxton world, of a very appreciative and sympathetic nature, told me that nothing previously had

given her so high an opinion of the power possessed by my husband, as his having the courage to give up his practice and throw himself upon his intellectual resources for a livelihood.

I cannot quite take leave of our Aylsham life, of the years during which my husband was in full practice as a medical man, without some mention of the regret with which his departure from the neighbourhood was regarded by his friends, and especially by those who looked to him for professional help. He could do but little towards supplying a successor equal to filling the place he had occupied in their esteem and confidence, and it could not but cause him regret to separate from those who had bestowed upon him appreciative regard, and with whom there had been constant kindly intercourse. Happily the intercourse could at all times be partly maintained by letters; and at first it was each year resumed personally, to the gratification of both sides. To the poor of the district, especially those who had been his private patients, his removal was a great loss, but even from them he was not at once and entirely separated. He was able to let fall a small portion of his mantle on a lady friend of great intelligence and judgment, who, in view of his departure, took lessons from him in the symptoms and treatment of all common ailments, and who did treat them very successfully, referring doubtful or difficult cases to him by letter. She undertook this work and responsibility entirely with a view to lessening the deprivation which the

poor of her own and adjoining parishes must experience in losing their kind doctor. That he was such to them, that his care of this class of patients was not of the stinted, perfunctory sort they sometimes receive, was shown in their lamentations at the time of his leaving the neighbourhood. It was still more strikingly attested by the fact, which a resident practitioner in the same district once spontaneously mentioned to me, that, after the lapse of quite a quarter of a century, Dr. Mann's kindness was still spoken of amongst them. That he was not only with this class, but with all his patients, most considerate and reasonable in his pecuniary demands, and merciful in remission of them, where he knew that they could not be met, need hardly be stated of such a man.

Ventnor, in the Isle of Wight, was the place he selected for our winter residence, and thither we went for the first time in November 1853, establishing ourselves the day after our arrival in the apartments we never changed from in Boniface Terrace; that is, at the foot of the downs which give shelter from the north. We took with us an introduction from Dr. C. J. B. Williams to Dr. Martin, the well-known physician of the place. We ourselves did not know an individual there. But from this single introduction, which was most cordially and hospitably responded to by the doctor, his wife, and brother, we came at last to possess a most charming and attached circle of friends—a circle, association with which I look back upon as one of the

brightest and most cherished incidents of our married life. I may well do so, since it included, amongst other interesting and cultivated people, the Rev. James White, the friend of Dickens and Macready, a poet and author of the *King of the Commons;* Miss Sewell, the authoress of *Amy Herbert;* Admiral and Lady Jane Swinburne, the parents of Mr. Algernon Swinburne; and last, but first in place, the Laureate, then Mr. Tennyson. We already enjoyed the cordial friendship of Mr. White and his most delightful wife, when, through them, we began to make the acquaintance of the great poet of the day. I possess letters showing how this developed into charming, friendly intimacy with both Mr. and Mrs. Tennyson, whom we visited at Farringford, their Isle of Wight home. My husband's scientific knowledge and tastes were a bond of union between him and the poet, who, as his readers know, has the keenest appreciation of science. The letters to which I have referred are among my most valued possessions, and the intercourse they recall was of a nature which I shall always dwell upon with delight. In this place, however, I must not do so further than to tell of the one literary attempt of my husband's that was connected with it.

The year of our making the Laureate's acquaintance was that of his publishing *Maud,* a poem in which we delighted, no doubt with double zest because now we knew the writer of it, but which fared, as some will still remember, miserably at the hands of the critics. My husband so took to heart the stupid misapprehension

and unfair treatment it had encountered as to desire to give some help to its obtaining a better and more just appreciation and recognition. He therefore wrote a complete analysis of the poem, showing how each separate portion unfolds not only the sad drama that is the subject of it, but also the character of the one actor who speaks in it, and drawing attention to all the passages of special beauty or power with which it abounds. He published his analytical sketch under the title of *Tennyson's Maud Vindicated: an Explanatory Essay,* and did so with the Laureate's sanction and approval. For Mr. Tennyson was sufficiently interested by his insight into, and appreciation of, the meaning and the merits of the poem, as well as grateful for his advocacy of it, to look through the MS. of the essay, and both to approve and suggest alterations in it. This, however, is not stated in the printed work, and it was with no little surprise that I have seen, since my husband's death, the following notice of it, in the *Biographical Sketch of Lord Tennyson,* by H. A. Jennings. "Dr. R. J. Mann, however, came forward with an explanatory essay by way of vindicating Tennyson's work, and so satisfactorily was the work of explanation performed that the poet, in acknowledging the service, said, "None with this essay before him can in future pretend to misunderstand my dramatic poem *Maud.* Your commentary is as true as it is full." This is an exact copy of a passage in a letter from the Laureate, which I still possess, and which continues thus: "and I am

greatly obliged to you for defending me against the egregiously nonsensical imputation of having attacked the Quakers or Mr. Bright. You are not aware, perhaps, that another wiseacre accused me of calling Mr. Layard an Assyrian Bull." How any portion of this letter found its way into Mr. Jennings' book I do not know ; I can only suppose that on some occasion it was shown or read by Dr. Mann to an individual who retained the passage in his memory and wrote it down subsequently. Neither this nor any other of this valued series of letters was, to my knowledge, ever put into any one's hands to copy or make extracts from.

Maud Vindicated was published in 1856, and was but an accident, as I may say, in the literary work which my husband carried on and accomplished during the four years, the winters and springs of which were passed at Ventnor. In the first of them he once more took up the subject of Physiology, to which he had intended that his treatise on the atmosphere should be an introduction, beginning with a contribution to Gleig's School Series called *The Book of Health.* This came out in 1854, and in the same year he was busily engaged, on his own account, with a complete work on this science, complete as far as was compatible with the purpose for which it was intended—that of an elementary text-book for the use of schools. It was brought out by the Jarrolds in 1855 with the title, *A Guide to the Knowledge of Life, Animal and Vegetable.* This work, in the opinion of its publisher, should have achieved a

marked success; and so too thought our friend the Laureate, for he not only expressed admiration of it, but, as I well remember, advised its author not to part with the copyright of it, believing that it would prove a property worth retaining. The book, however, did not realise these favourable anticipations, and in 1861 my husband, who had hitherto received a royalty on its sale, took £200 from the Jarrolds in exchange for the copyright. It had then gone through three editions, but from that time has received no revision, though it has continued to be in circulation. Only in the last year of his life he expressed his regret that the publishers had never engaged him to bring its contents up to date, and that his own circumstances, as to leisure and means, had not allowed him long before to volunteer to do so. It could not but be a vexation to him to know that statements, which the enormous advances in the science of physiology in recent years had made incorrect, should still be put forth as sound knowledge, with his name attached.

He followed up this book with a small treatise, written immediately after, which he called *The Philosophy of Reproduction,* in order, as the preface stated, "to explain familiarly such points of physiological science as could not have appropriately been noticed in *The Guide to a Knowledge of Life,* just published by the author, on account of that being designed for a very general circulation, and to a great extent for the use of the young." The little volume was brought out

by the Longmans in 1855. It was very favourably reviewed in the *Examiner* by its then editor, Mr. John Forster; and our humorous friend Mr. James White of Bonchurch wrote of it, "that it might have been read aloud by the Chief Vestal to her College of Virgins." With the Longmans my husband during these years published yet another work which he had been engaged in writing, a Reading Book for Schools. *Lessons in General Knowledge* was the name he gave it, and it came out in three separate parts. These continued to sell up to last year (1887), but, as might be expected, in constantly diminishing numbers, and the firm then withdrew them from circulation. They had inevitably been superseded by the many series of reading books which have been brought out during the more than thirty years that have elapsed since they first appeared.

Our first spring at Ventnor saw my husband engaged also in beginning to carry out the Jarrolds' plan for putting scientific truths within reach of the artisan class. He then wrote the first of a series of tracts, ultimately consisting of six, on which he was occupied at intervals during the next three years. They were on sanitary subjects, as Fresh Air, Pure Water, Good Food, Wholesome Drink, Warm Clothing, and a Well-trained Mind, the worth and importance of each being explained and insisted upon. Though published separately at first, the whole series was afterwards made into a small volume with the title of *Health for the*

Household. These tracts are worthy of remembrance, as being one of the earliest attempts to bring a knowledge of sanitary matters under the notice of the labouring classes. Writing of these tracts in 1865, Mr. Thomas Jarrold says : "Your sanitary tracts, Worth of Fresh Air, etc., have been very useful." I believe that he, as their publisher, was satisfied with the success of them in a business point of view, and that they had a large circulation. Indeed, they are still sold by the firm, and the "Ladies' Sanitary Association," which adopted them as adjuncts to its work, still includes some of them in the list of books which it issues or recommends. For each my husband received the sum of £10, and had no further pecuniary interest in them; but, as late as 1866, when they were to be reprinted, he went through them for revision. I have come upon a letter written to him in 1857 by Lord Suffield, the postscript of which is as follows: "Your little books, it may be interesting to you to know, have found great favour at the Palace, those on Food and Air particularly. Lady Suffield has just been requested to send some copies for the children. The Queen has heard of them and wishes to see them. We send them immediately from Jarrolds'." I had quite forgotten the fact which this postscript made known to us, though it must have been a gratifying one to myself no less than to my husband at the time. It is even more gratifying and of greater interest to me now, when I encounter it unexpectedly thus long afterwards.

It was during the years of our Ventnor life also that his connection with the *Edinburgh Review* began, his first contribution to it appearing in the October number for 1855. This was a review of the *Plurality of Worlds*, which just then was creating so great a sensation. The article was very highly thought of by those who dissented from the views of the author, in proof of which I am able to give the following extract from a letter of the then Dean of Salisbury to the then Dean of Ely, Dr. Peacock: "Can you tell me who wrote the masterly refutation of Whewell in the last number of the *Edinburgh Review?* I fancied at first, from the vigorous style and profound knowledge of the subject, that it must be Herschel, but the laudatory mention of his name forbade the supposition. Whoever it is, he has torn Whewell's arguments to shreds." The second article that my husband wrote for the *Edinburgh* belongs also to these Ventnor days. It was a review of De la Rive's great work on electricity, and was published in the July number for 1857. Of it the editor himself wrote to him: "Your article was a very great success indeed. I hear from the most competent judges that it is the most masterly survey of electrical science that has yet appeared." During the same years, as many as twenty of the articles he contributed to *Chambers's Journal* were also written, and even this does not exhaust the amount of literary work accomplished by him between the end of 1853 and the summer of 1857, for he assisted his old friend and

former teacher, Dr. C. J. B. Williams, in bringing out the third edition of his *Principles of Medicine*, which appeared in 1856. The character and extent of the help he gave is most handsomely acknowledged by the author in his preface, where he speaks of having "secured the valuable assistance of my friend and former pupil Dr. R. J. Mann, who has contributed several articles on recent investigations in physiology and animal chemistry, and who has taken great pains in revising the composition of the whole work." And since my husband's death I have received from this now venerable friend a renewed and most touching expression of obligation for the service thus rendered.

Though the practice of his profession ceased to be my husband's prime occupation when we left Aylsham, he by no means abandoned it entirely. Indeed, during the nearly four years of which the winters and springs were passed by us at Ventnor, the summers and autumns were spent in Norfolk, and the first two years at Cromer, which brought him within reach of his old neighbourhood and among his former patients. He also formed new ones among the many visitors who even then came to this favourite seaside resort of our east coast. He had prepared the better to take advantage of such casual work in his profession as the place might afford, and as his then migratory life rendered possible elsewhere, by qualifying to practise as a physician. For this purpose he went to Scotland in March 1854, and passed the examination for his M.D. degree at the University of

St. Andrews.[1] During the last two seasons of our life at Ventnor he had indeed enough of professional work, to make what I have shown that he accomplished in literature the more remarkable. Besides invalids from Norfolk—who, being entirely under his care, took him regularly from his desk—his friends of the locality sought his advice in serious cases, in conjunction with their regular medical attendant.

At Cromer, as at Ventnor, his scientific as well as his professional attainments procured him many agreeable acquaintances and social enjoyments, chiefly among the members of the Gurney family and of the allied ones of the Buxtons, the Barclays, and the Hoares, of which Cromer may at this time be said to have been almost the pocket watering-place. It was thus that my husband acquired the friendship of Mr. Gurney Barclay, and with it the delight—one of the most exquisite, I know, that he could have—of visits to that gentleman's beautifully-appointed observatory at Leyton. To Cromer also he owed the much-prized friendship of Professor Selwyn, then Lady Margaret Professor of Divinity at Cambridge. This friendship led to delightful visits paid by us both at Cambridge and at Ely, and to a correspondence hardly less delightful, which was never wholly interrupted until the professor's death. In this case the acquaintance was begun on professional grounds, but quickly became a personal attachment, heightened by the interest mutually taken in astronomical pursuits.

[1] In 1878 he was elected a Fellow of the Royal College of Surgeons.

Just as we left Aylsham my husband was on the point of replacing the telescope, whose manufacture I have described, by a really first-class instrument, and on our way through London to the Isle of Wight we picked up the $2\frac{3}{4}$-inch refractor that Ross had been constructing for him. The old telescope, to which store-room had, I think, been kindly given by some friends in Norfolk, was taken by Professor Selwyn, after our acquaintance with him began, to be set up in his own place at Foxton, where it was sedulously worked by him for some years. After a time he too replaced it by a superior instrument, but I think that some at least of his sun-autographs, as he called his photographic views of the sun, were taken by the old one. I may mention here that one of the letters from Lord, then Mr., Tennyson, to my husband reminds me that the other and earlier-possessed telescope found its way to Farringford, in order that the poet might himself observe at pleasure the star-views and other objects in the heavens with which he had been so much interested when shown to him at Ventnor. Thus these two humble instruments in the end came to be used, the one by noteworthy, the other by distinguished, hands.

In the telescope by Ross my husband possessed at last a really good lens to work with. It is in fact a very fine specimen of that instrument-maker's work, and was specially selected for him out of three ground at the same time. That such was the case was confirmed to us, many years after, by Mr. Ross's son-in-law,

the late Mr. Dallmeyer, who told us that the old man took a great fancy to his customer, and was interested in giving him the very best specimen of his work he could. But, just as possession of this much more valuable instrument was obtained, my husband lost the use of even his rough observatory through our change of home, and had to work his telescope with only a movable stand. Here, however, after a time, a friend came to his help in the person of Admiral Swinburne, who showed the greatest interest and kindness in turning out from his lathe the delicate screws necessary for movement and adjustment, and in improving the design and construction of a stand as firm as could be made, compatible with its being also movable. Upon a ledge of the steep slope below Boniface Terrace at Ventnor, of which he had secured the use, and which he levelled and otherwise made safe to be upon, my husband had at last, thanks to this stand, the power to use his telescope with comparative ease and satisfaction.

We returned to Ventnor for the fourth time at the end of 1856, feeling more than ever that in it we had the home and friends we might well wish to be permanently associated with, and little dreaming of separation from them. But, shortly after our return, as suddenly as unexpectedly, a proposal came which in a few months took us away from both. This unlooked-for change in our anticipations was the result of an acquaintance formed with Dr. Colenso before he became Bishop of Natal. On the 5th of January 1857, the

very day on which my husband completed his fortieth year, the Bishop wrote to him asking him if he would come to Natal and join him, as Lay Head of the Missionary Station, or Central Institution, as he called it, over which himself presided episcopally. This letter reached us about the middle of March, and after a day or two I became aware that my husband was inclining to entertain the proposal seriously. I confess to having experienced a great shock on discovering that I might have to face exile from England; but I had no objection to raise that was at all valid against the many reasons for regarding the offer as one which was worth accepting. Besides the lay headship, the Bishop named medical and scientific teaching as a part of the work to be undertaken; he even mentioned an observatory as a possibility. All this was in the highest degree attractive to one of tastes and attainments such as my husband possessed; while a young colony of itself seemed to promise a wider and freer field than the old land was now likely to afford him, and hence a more extended as well as a most honourable career. So, after full deliberation and consultation with relatives and friends, he decided on accepting the Bishop's offer. Not that any gave their assent gladly to his decision. On the contrary, all expressed, many of them in letters which I have recently re-read, the keenest regret at the prospect of his thus expatriating himself, and the highest appreciation of the intellectual and social qualities which made his departure from among them such

a deprivation. At the same time all his correspondents recognised the grounds these afforded for the belief he himself entertained that he could not fail to find in the colony a wide field for their exercise.

The decision was arrived at within a fortnight of the receipt of the Bishop's letter, but we did not leave England until the middle of July, and remained at Ventnor until early in May, during which two tracts of the series *Health for the Household* were written. A short visit was also made to London in April, which resulted in fresh literary work; for, while there, my husband went to Blackwall and there met Mr. Samuel Gurney, at that time chairman to the first Atlantic Telegraph Company. Within a week of his return he received a letter from this gentleman, in which, after referring to having had the pleasure of meeting him at Blackwall, and learning that he had some intention of writing on the subject of the Atlantic Telegraph for *Chambers's Journal*, he proposed to him, at the suggestion of the Directors of the Company, that, in conjunction with their secretary and electrician, he should write the pamphlet they wished to have drawn up and published on the same subject. The proposal was gladly accepted, and the writing of the pamphlet was at once begun and carried out amidst all the distractions of last visits to, and leave-takings from, friends, and of our final departure from Ventnor, first for London, then for Norfolk, where the same interruptions had to be met. During the month of June he also spent ten days at Greenwich

with Mr. Wildman Whitehouse, the electrician to the Company, seeing and assisting him in his almost hourly testings of the cable. He thus became fully acquainted with, and able to describe, the work that had been done in preparing it for its deep-sea bed. The pamphlet was in the hands of the directors before the end of the same month, as appears from a letter of the secretary addressed to him on 29th June, which conveyed their thanks for the great interest and attention he had manifested in its preparation, and enclosed a cheque for fifty guineas "as some small expression of their sense of his labours." I may mention here that, as recently as the year 1880, this pamphlet was brought to my husband's mind in a somewhat singular way. He was at a soiree given by the Telegraphic Engineers, and in the library encountered Mr. Latimer Clark, who, in conversation with him about the books it contained (of which he was at the time, I think, making a catalogue), mentioned this account of the first Atlantic Telegraph, with the remark that he had never been able to learn who was the writer of it. To his surprise he was told that he was speaking to the very man who could best give him the desired information; which he secured from being again a matter of doubt by getting Dr. Mann to write his name in the Society's copy, as the author of the pamphlet.

Preparations in the way of outfit for the great change of home we were contemplating, and arrangements for our voyage to Natal, had both to be attended to and carried on by my husband in the midst of his constant

occupation with his pen. He was from the first eagerly considering the scientific equipment he might find it possible to take with him, particularly for astronomy. For this he was already provided with a telescope, stand, and transit instrument. But he greatly desired to add an astronomical clock, that, in case the observatory of which the Bishop had given hopes were established, he might have to hand this indispensable adjunct to the work of it. As such a clock was more costly than he could find the funds for out of his own means, he appealed to some who were likely to be interested in science to assist in what would tend to its promotion. From Mr. Hudson Gurney, his half-sister Miss Anna Gurney, and from other friends, he received so liberal a response that the clock was purchased, and formed a very ponderous portion of our outfit.

He wished indeed to undertake, in the new land to which he was going, some work of a scientific nature likely to be of permanent value, and thinking he might best do this in the direction of astronomical observation, he sought an introduction to Sir John Herschel, to have the advantage of his advice and opinion in the matter. This he obtained by the kindness of Mrs. Cameron, whom he knew through our friendship with the Laureate, the result being that the great astronomer advised him rather to take up Meteorology, as entirely untouched ground in South Africa, and compassable without the expensive observatory arrangements necessary to satisfactory work in astronomy. "Within seven years he

might," Sir J. Herschel said, "by continuous observations determine the climate of Natal." At very short notice, therefore, he proceeded to arrange to take out with him the standard instruments necessary for this purpose. From the first anticipation of life in a new country, he had bethought himself of Photography, a scientific art in which he had always been greatly interested, as a valuable means of showing what the land and its people were like. He was fortunate in being able, during his last weeks' residence at Ventnor, to obtain from a first-rate amateur photographer lessons in the practice of it; and a handsome fee from a family, who had been his patients there, supplied him with the means of purchasing a camera and photographic appliances, with which he continued to practise at intervals, even amid the bustle of preparing to leave England.

Our personal outfit, therefore, was small by comparison with the instrumental equipment and the store of books, deemed by both of us yet more indispensable, which accompanied us; when at length, on the 20th of July, we found ourselves on board *The Hotspur*, a sailing vessel bound for the Cape of Good Hope. It belonged to the old East Indiaman class, and had an able and kindly commander in Captain Joseph Toynbee. We spent eight weeks all but a day in a voyage that is now accomplished in less than half that time; for it was not till the evening of 15th September that, by starlight, we cast anchor in Table Bay, and slept without rocking for the first time since leaving England. But, while we

enjoyed this luxury of thorough rest, our vigilant captain had none. Fearing the rise of a south-easter, he stood some hours, axe in hand, ready to sever the cable which held the anchor, that we might at once run out to sea should his fears be realised.

The break in our voyage at the Cape brought us into association with the then head of the Royal Observatory, Mr., afterwards Sir Thomas, Maclear, and with his family, and so laid the foundation of a friendship of much value to my husband in his scientific work, and still more prized by both of us on personal grounds. After ten days, spent chiefly with these delightful and cordial friends, we proceeded to our final destination in a small and dirty steamer, and landed at Durban on 5th October. During the last hours of our voyage we kept so near the coast that we had a good view of the country to which we were bound, and received a very favourable impression of it. It was cheering to find it resemble in greenness, in picturesqueness of hill and valley and wood, the dear old land we had forsaken for a while. As it had been arranged beforehand that our home should be with the Bishop as a part of his family, we went, on leaving Durban, straight to his Mission Station, which lay a few miles beyond Maritzburg, and was then called by the native name Ekukanyeni, but afterwards, as now, Bishopstowe. Here we remained nearly a year and a half, a period to both of us of ever-increasing dissatisfaction, the anticipations we had been led to form, both of the place and of the

position my husband would hold in it being doomed to disappointment. Not that there had been any intentional misleading or misrepresenting in the matter, but that the Bishop took too sanguine a view of the possibilities of the situation, and entertained unpractical ideas of what was desirable or even possible to be done by those he brought around him. I could prove this by pertinent illustrations, but I have no wish to dwell on the particulars of an association that must have brought as much disappointment to the one side as to the other. I prefer to record that, in spite of a difference of views which could not but make itself felt, no real unfriendliness resulted, and nothing beyond an occasional slight clash of opinions occurred. It is a pleasure to me to be able to say this, and to recall, as I can, especially in the earlier part of our life at Ekukanyeni, much that was agreeable in our intercourse with the bishop and Mrs. Colenso, and on some occasions frank and even cordial discussion of projects and proposals.

I might now, therefore, pass on at once to the time when our life with the Bishop came to an end, but that I have to show what work, in spite of the cardinal disappointment just mentioned, was accomplished by my husband whilst it lasted. Science-teaching of the very simplest sort proved, as might have been expected, a worse than futile attempt in the case of the native school of the station; but he carefully prepared (as a syllabus of them still shows) and delivered to a Catechists' class a series of lectures comprising a complete

outline of Vegetable and Animal Physiology, the latter being mainly directed to giving such an acquaintance with disease and its treatment as might be of service to those about to engage in missionary work. The medical charge of all dwellers on the station, black as well as white, was in his hands; and at all times he might be called upon to give medical help to any native who chose to come there in search of it. The Meteorological Observations recommended by Sir J. Herschel were commenced in 1858, as far as was possible with deficiency of instruments. The rough waggon journey from the coast had proved fatal to one at least of the thermometers, and it had to be replaced from home, which meant the loss of several months. Much laborious work was constantly done with photography. I say laborious, because such it always seemed to me from the many circumstances difficult to command that were requisite for success, and the oft-repeated trials and failures that had in consequence to be made, and made good. Almost every mail some views or portraits were sent home by ourselves and the Colensos; and on counting up the numbers that had so gone within a few months, we found, on one occasion, that they amounted to nearly a hundred. All the while too, there was never an interval, I think, in which some literary work was not in progress. In the first year of our being in Natal a second series of tracts for the Jarrolds was begun, that which ultimately formed the two volumes called *Science for the Household*. The first of these, with the sub-title of "The Earth,

and its Garment of Water and Air," contains six tracts the subjects of which are—"The Great Round World," "The Wide and Deep Sea," "Busybody Oxygen," "The Invisible Air," "The Inconstant Wind," and "The Refreshing Rain." They were all written before the end of 1858. In the same year he also wrote at least the greater part of a book on Medicine, designed, as the preface states, "as a contribution to the needs of persons of fair education and intelligence who have been placed by the chances of life beyond the reach of professional medical assistance." It also states, "the book does not profess to be a 'domestic medicine,' to be looked into like a dictionary," but is meant "to be studied day by day until its entire scope and aim have been mastered." It was therefore arranged on the same plan as his *Guide to the Knowledge of Life*, and when published, which was not until 1861, it bore the title of *Medicine for Emergencies*. That it found but a very limited number of readers willing as well as able to study it as expected, I think may be taken for granted, as also that only a very few of those for whose benefit it was intended had both leisure and education sufficient for the purpose.

So little had the position at Ekukanyeni realised our anticipations of the lay headship of a Mission Station, and so little did Natal appear to offer the fair field for my husband's energies and powers which we had hoped it would, that before the end of a year we had not only come to doubt how long we should continue

with the Bishop, but even to contemplate a return to England rather than continue in so unsatisfactory a position. And the last alternative would perhaps have been the end of our venture, but for our having had the good fortune to take out with us an introduction from Mr. Labouchere, the then Secretary of State for the Colonies, to Mr., now Sir John, Scott, at that time Lieutenant-Governor of Natal. Never was an introduction met in more cordial and generous fashion, and at once we profited by it in delightful hospitality and friendly intercourse at Government House, over which presided as hostess one of the most true and kindly-hearted of women. And to this circumstance eventually was owing the offer of an appointment, which opened up to my husband a career well suited to his tastes and abilities. Just at this time the need that something were done in the Colony for Education had come to the front, and proposals with regard to it were made in the Legislative Council. There was talk at first of a commission for inquiry and the drafting of some scheme; but in the end Mr. Scott decided to place the matter in the hands of one individual, and to make him responsible both for devising a feasible plan and for putting it into execution. This was known for some months before the definite appointment was made; but during that time it came to be pretty well understood that the person whom his Excellency designed for the post was Dr. Mann.

Thus, just as the severance of our connection with Ekukanyeni had come to be equally desired on both

sides, and it was felt that the event could not long be postponed, a prospect began to open which justified our not deciding to give up the Colony altogether. In March 1859, therefore, we moved into Maritzburg, having hired a small house there, in which we enjoyed once more the much-missed possession of a home of our own. Before this change was made, my husband had already been employed by the Lieutenant-Governor on public work, having been placed by him on a commission appointed to consider the merits of certain essays descriptive of the Colony, that had been written in consequence of three prizes being offered by the Legislative Council for the three best among them, with the reservation that the material so obtained should be at the service of the Government. Only one prize was awarded, and that was divided between two of the essayists. Ultimately, therefore, Mr. Scott requested Dr. Mann to prepare from them and other sources such an account of the resources and capabilities of the Colony as might make it a guide-book to intending immigrants. The writing of this book was on hand before our residence at Maritzburg commenced, and was continued with interruptions until it was finally completed and formally approved in the September following. The interruptions were the unavoidable consequence of my husband falling out of health soon after we came to Maritzburg. He began to suffer from what are locally known as Natal sores, a species of indolent ulcers very difficult to heal if the health is already below par, as it

commonly is when they become troublesome. All through May, June, and July of 1859, while the Guide-Book was in progress, he was more or less ill and disabled from this cause. The extremities, as is usual, were in his case the great points of attack, and the only certain cure is continued rest, keeping the feet up and the hands quiet. As he could only follow this plan intermittently, again and again the fever returned with severe pain in the affected limbs, the consequence of interrupting too soon the regimen necessary to complete recovery.

In the first days of July he received official notification of his appointment as Superintendent of Education for the Colony, and thus a very important help to the restoration of his health. For the interval between relinquishing his engagement with the Bishop and now again being assured that Natal was to furnish him the means of livelihood, had necessarily been a period of considerable anxiety; and, as it followed the experience of disappointed expectations, it had no doubt to do with the failure of health which was showing itself in the troublesome and painful fashion peculiar to the Colony. The same anxiety, too, had been present more or less ever since our marriage, for up to this time we had never possessed more than a modicum of certain income, and he had for some years borne without cessation the strain of having to fear lest his earnings by his pen, supplemented occasionally by his profession, should fall short of what was necessary to meet our moderate

requirements. They had never done this, and they had been husbanded and administered by him with such skill and carefulness that even the special demand, occasioned by our leaving England for Natal, caused him no real embarrassment in money matters. I only do justice to his character, in regard of such matters, when I add here that his carefulness never meant close or hard dealings with others, but the reverse of stinted or illiberal payment where indebtedness had been incurred. In all transactions, whether large or small, he was incapable of seeking eagerly to have the utmost possible either for his work or his money, or to obtain anything for less than its full value. Often, indeed, have I been the witness that, where his own interest was concerned, he was too easy to deal with.

The appointment, for which he was now named and recommended to the Home Government by Mr. Scott,[1] brought him the ease, never before experienced, of an assured income more than equal to our requirements. It brought him what he could not but prize almost more, a larger field than had ever been open to him, in which to prove to himself and others the full extent of the mental capacity he possessed. He might well feel now that he was to owe a fresh start in life to his coming to Natal, and to the friend who had formed a just estimate of his powers and had acted on it. Gratitude for the important practical recognition thus bestowed never ceased to actuate him to the end of his

[1] Confirmation of the appointment reached Natal in January 1860.

life. Nor was this the only instance, though, as it deserved to be, it was the most conspicuous, of the strength and reality in my husband, of a feeling of which it is common to remark that it is rarely lasting. In him, on the contrary, gratitude was an enduring feeling; and among the most beautiful points I recall in looking back over his life, is the constant recognition on his part of the claims of those who had done him helpful service or shown him special kindness. To his mind it seemed that a return for these was ever due, and it was given with alacrity not only when asked, but often unsolicited, as if there were a delight in surprising or in surpassing expectation. To the last of our being together I felt that I kept learning from him the lesson of what true gratitude means.

That he entered upon the new career now opened to him with all the ardour and energy of youth, of one who might have been as little past twenty as he was past forty, was with such a nature as his a matter of course. Because he had already reached that maturer age, he brought to it also the larger experience, the riper judgment, the wider knowledge of himself and of the world, which those additional years had developed in him. How quietly, and with what plain good sense, though with every energy and faculty alive for its service, he proceeded to initiate and carry out the important work entrusted to him I vividly recall. It was started with no grand scheme, concocted in the study and looking fair upon paper, with no imaginative

picture of what was to be, built solely upon the foundation of what was wished should be (the sort of romance into which the enthusiast weaves his ideas of the work he is to accomplish), but in the quietest and most unpretending way, almost, some might have said, without any scheme at all. He had, however, in his own mind a very clear purpose and practical plan, and that was to make the best at the outset of whatever the Colony already possessed in the way of schools and teachers. His idea was to upset as little as possible, to retain, to utilise, and to improve as much as possible of whatever existed. He thus avoided opposition from those in authority who might have demurred to much interference with the schools already established by Government. He further avoided coming upon the Legislative Council with heavy demands for money, as he must have done had he proposed to carry out at once any extensive scheme ; and, above all, he avoided throwing into antagonism the body of teachers connected with the existing schools. Scarcely any of these, it is true, were well qualified for their work; but they had done something towards education when no better were at hand, and they would in consequence deem themselves deserving of consideration. This they had to the full, short of absolute wrong and detriment to the public service, from their new head, the Superintendent of Education.

In nothing perhaps was my husband's success, as the holder of that office, more marked than in the good feeling he established between himself and the teachers

in his schools. They soon came to know that the most careful and kindly attention would be given to every claim or complaint for which they felt that they had any ground, and that justice and forbearance would be exercised to the utmost in their behalf. It was here indeed that he first had the opportunity to show the power of working harmoniously with others, of making those, who had to act with or under him, do so willingly and cordially, which in later years was, I think, widely recognised as one of his characteristics. He possessed the sure tact of the man who thinks of others before himself, who takes account of their claims and expectations, and meets them, not with antagonism and dislike, but, unless rudely or offensively put forward, with kindly consideration and attention. Often, indeed, they were met by him with more than this. Almost all who had official or business relations with him became impressed with his willingness to bestow on their special affairs not only the attention they might have expected, but even friendly concern and trouble, such as called up feelings of grateful regard.

The first thing essential to really beginning his work as Superintendent was that he should visit and ascertain the condition of all the schools already existing in the Colony. This could be at once accomplished so far as Maritzburg was concerned. But the Guide-Book had to be finished, as well as his own health sufficiently restored to allow of his riding, before he could undertake his first journey for this purpose. For

the last-named reason it had to be postponed till the middle of September, though at the end of the previous month he had read aloud to the Governor and members of the Immigration Board the whole of the MS. of the Guide-Book. Durban and the coast districts were first visited, and within ten days of his return thence he started up country. From this journey, however, he was driven back, when half accomplished, by an accident in riding, such as is very apt to happen in Natal. Wet weather makes the roads so slippery that the rider betakes himself to the grass which borders them, and there encounters the risk of his horse thrusting its foot unawares into a hole of the ant-bear, when down come horse and man. This is precisely what occurred to my husband on this occasion, and his horse, in its struggles to extricate itself from the hole, rolled upon him, crushing in his ribs, and causing such violent expulsion of air from the lungs as made the mounted native policeman, who fortunately was accompanying him, conclude that nothing less than a fatal injury had occurred. It was, however, hardly a serious one, for Dr. Mann was able to mount again and return slowly to the house whence he had started, and, while resting there, to send me news of the misadventure. On receiving it I consulted with medical and other friends, and they were of opinion that I should send up a travelling waggon to bring him home. I had succeeded in obtaining the loan of one, and was entering our house after doing so when, as I opened the door, I could hardly believe my

eyes which saw his saddle bags lying on the table within. He had come on, after the short rest, sure that he would recover best at home, and that his powers of endurance would hold out for the ride of over thirty miles, which with injured ribs he had to accomplish. As assuredly they did, and I do not remember his making much of what he had gone through, though it can have been no little in weariness alone from the tedium of having to ride so many miles at a foot pace. I recollect only the utmost cheerfulness and satisfaction at having managed to return at once.

I may here relate the one other accident in riding which befell him in Natal, because it yet more strikingly displays his strength of will, and his fine courage and endurance in the presence of pain. It occurred in 1862, on one of the many visits he made to Bishopstowe, in order to look after those on the Station who were sick and requiring his attendance. On this occasion he was on a part of the road which was no more than a track in the grass, and his horse, at that time neither a large nor a too sure-footed one, made a long slip, from which it did not recover, and so brought itself and its rider to the ground. My husband fell on his right elbow and dislocated his shoulder. He was, of course, at once in great pain, but led his pony on to the Station, and tried himself so to direct the Bishop that he could reduce the joint for him. But the Bishop proved unequal to this surgical feat, and so a messenger was despatched to summon our friend, Dr. Johnston, the surgeon to the 85th

Light Infantry, then stationed at Maritzburg. But again my husband preferred to get home as the first thing to be done, and announced his intention of walking the nearly five miles between our house and Bishopstowe. On finding him determined to do so, the Bishop most kindly accompanied him, removing his shoes and socks for him where they had to cross a run of water, putting them on again, and not leaving him until they met Dr. Johnston on his way out in answer to the summons. I chanced to catch sight of my husband as he entered our garden gate, the doctor following him, and saw that his arm was in a sling. I ran to open the door, and can now recall, as if it were yesterday, the bright, cheery smile with which he met my astonished and anxious looks, as if at once to assure me that no great thing was the matter. It was a day of blazing Natal sunshine when he took this five-mile walk carrying a dislocated shoulder, and the pain of it must have been greatly aggravated by exposure to the scorching heat. But there was no complaint of what had been endured, only cheerful assistance, as far as possible, while Dr. Johnston and I cut and removed what was necessary of his literally drenched garments. The shoulder was immediately reduced by the trained skill and strength which now took the work in hand, and the extreme exertion, which had been made while it was still out of place, did not lead to any serious result. The use of the arm was recovered without any drawback of superinduced illness, and the accident was only brought to mind by a tend-

ency, for two years at least, to suffer rheumatic pain in the right arm and shoulder.

From this digression I return to the time of the first accident in riding. The journey, which had been interrupted by it, was resumed in very little over a fortnight, and this time fully accomplished. But this time also with some adventures, caused by heavy rains, which had made the bridgeless rivers impossible to cross at the usual fords. And so it happened that his powers of endurance were again put to the test; for, in consequence of this hindrance, a night had to be passed in a Kafir hut, where no food was to be had that he could eat, the sour milk and the *utywala*, or Kafir beer, being both alike repulsive to his palate and his stomach. He had therefore to go twenty-four hours almost without food, all the daylight of which was spent in riding amid steep, rock-encumbered hills, he and his companion being turned back into them by the swollen Bushman's River. Again his horse had to be mounted in the morning to reach a Dutchman's house, where at length, he being now well-nigh spent, eatable food was set before him. I learned afterwards from his travelling companion that his pluck held out to the last.

Another short journey this year took him through the only other district of the Colony in which at the time there were any schools to be visited. From henceforth, as long as we remained in Natal, the same journeys were repeated each year, and each year saw them lengthened, until at last he made little less than

nine hundred miles on horseback during the twelve months. They came also to extend more and more into the remoter parts of the Colony, as year by year he was able to establish fresh schools, or arrange for more itinerant teachers, among the scattered Dutch homesteads. It was only by means of such wandering schoolmasters, who would spend a few weeks or months at one farm and then move to another, that any attempt could be made to introduce education among this portion of the colonial population. In the last two years of our residence in Natal, superintendence of the Native Schools supported by missionary efforts, with a commensurate increase of salary, was also added to his charge, all such schools coming under Government aid, and therefore under his supervision, provided they added industrial training to book teaching. This had already been done in some instances, and was in many more, when a state subsidy could be obtained. The larger number of these native schools were at Stations established and conducted by missionaries from America, by the Ministers at the head of which he was cordially received.

Each of these first visits of inspection was followed by a report to Government of the exact state in which he found the several schools, and, when the entire Colony had been thus visited, by a General Report of the state of education within it, which was laid before the Legislative Council at its next session. The same General Report was of course furnished every year, and I

have a printed copy of the last, written in February 1866, one month before we left Natal. This Report contains not only a statement of the then condition of every school receiving Government aid, but so fully displays my husband's views for the promotion of Education in the Colony, the methods by which he carried them out, and the zeal and earnestness with which he pursued his congenial task, that in no better way can I show both what he purposed and what he accomplished in connection with perhaps the most noteworthy work of his life than by giving the larger portion of it. I do so, however, as an Appendix, in preference to introducing it here. For it is of considerable length, and the interest and value of it, as affording the illustration I have in view, will be better appreciated, I think, if it is read by itself than if I allow it to interrupt the story of his life.

But though I place the Report in an appendix, I must refer to it to the extent of showing how it was regarded in the Colony at the time of its publication. It was thus commented on and analysed by one of the Natal papers, the name of which I cannot give, as I possess the article only in a cutting, headed Saturday, March 17th, 1866: "Dr. Mann's report, as Superintendent of Education, on Public Schools, is the best proof he can leave behind him that the period of his residence here has not been idly spent. If every man, after living here seven years, could render an equally good account of work done and objects attained, this would be a happy

and prosperous colony. Whatever difference of opinion may exist regarding the principles which should govern the system of public education established here, all must admit that Dr. Mann has, with very inadequate means, and under unfavourable circumstances, succeeded in setting to work a machinery extensive enough, and expansive enough, to place within reach of every colonist primary facilities of education. Few colonies, we believe, can show a better state of things in this respect. Nor is it an easy matter to provide the means of instruction in so small and widely-scattered a community. In the upper districts, within a radius of twenty miles, there may not, perhaps, be more than six families, separated by irregular distances, and in some cases too far from one another to be accessible daily by children. On the coast, parents as a rule want to make their sons useful just when their minds are most open to instruction. Then, too, persons are of all sorts and creeds. There are Presbyterians, Wesleyans, and Episcopalians, with conflicting prejudices to reconcile, and with notions concerning the degree or the nature of religious tuition that are too antagonistic to be ever reconcilable. Add to these primary difficulties the poverty of private means and of the public treasury, and the scarcity of really good and experienced teachers ready on the spot, and the work of a minister of education will not look either easy or encouraging."

"But heartiness and capacity in pursuit of a cherished purpose will go far to ensure success. Dr. Mann,

we believe, entered upon the duties of his post *con amore*, and he has worked steadily towards his end. Let us now see in how far he has attained that end. We find the answer in his own words. Six and a half years ago, when he assumed office, there were 2 government schools, comprising 218 pupils, and 9 other schools, with a collective attendance of 258 pupils, all of which cost the State £918 a year. There are now 45 public schools in the country, and 19 itinerant teachers, partly supported by Government. Under the 72 teachers thus employed, there are, taking the number on the records, 1744 pupils, of whom 1052 are boys and 692 are girls. It is also suggestive of a difficulty we have mentioned that only 454 are over twelve years old; the rest are under. While dealing with figures, we may state that the entire expenditure of revenue for public education was £4158; but a reduction of £543 has to be made for fees and sale of books accruing to the Treasury. The Government contribution to the cost of education is about balanced by that from private local sources, and amounting in the aggregate to £3228. In few words, then, Natal pays £6597 for the instruction of 1744 children by 72 teachers. The average expenditure on the one is £3 : 14 : 4; and on the other, £91 : 11s."

"Considering the difficulties we have named, and the fact that a large portion of the Europeans who come to Natal are of mature age, we don't think that the average of nearly one-eighth of the population as being under the process of instruction is to our disparagement. At

any rate, we know that the means to some extent are present, if persons only choose to make use of them. Of course, no one can expect that teachers who receive such petty stipends will be of a high order of merit; and we know that Dr. Mann has found his work exceedingly embarrassed by the imperfect help he has had to be content with."

The high opinion which this extract shows to have been entertained of Dr. Mann's fitness for the work of Superintendent of Education, and of the zeal and success with which he filled his office, has stood the test of time. For as recently as September 1886, that is, shortly after his death, and over twenty years from his leaving Natal, the *Natal Mercury* writes of him: "It is to Dr. Mann that we owe the establishment of our educational system. He was the first Superintendent of Education; he established our High Schools, and he reconstituted our Government primary schools. He also initiated the principle of aiding schools. For several years he gave up his time most unsparingly to a task which was to him a labour of love; and the measure of his personal success may be gauged by the extent to which his work suffered when his own part in it was withdrawn." And the *Times of Natal* of the same date, in its obituary notice of Dr. Mann, says: "He laid the foundation of a system of primary education which, slightly modified, is still in force, and is found highly effective."

Though from the year 1859 his work as Superintendent of Education was his great occupation, to which everything

else was subordinate, and that on which the ardour of his temperament and the vigour of his mind were chiefly expended, it by no means comprised all that he was engaged with. The obituary notice of the *Natal Mercury*, from which I have already made an extract, thus refers to the public portion of these subordinate occupations: "Dr. Mann, too, during his sojourn in this colony, took a very active part in all movements of a scientific or intellectual character. He was an accomplished lecturer, and his capacity of popularising science had been thoroughly tested and demonstrated in England before he came to Natal." In illustration of this statement, I may mention his connection with the Natal Society, the one literary association at that time in the Colony. In its behalf his power as a lecturer was often exercised, and he became its president in 1859, if not earlier. This post, I rather think, he retained as long as we remained in Natal; and to my surprise, as well as gratification, at the end of 1886, more than twenty years after, I received a letter from the Secretary of the Society, written at the direction of the Council, which, besides conveying to me their condolence at the great loss I had just sustained, expressed the Society's sense that in my husband it had "lost a friend who always took a deep interest in its welfare, and who worked hard for its interests during his sojourn in Natal." Of the other lectures delivered by him in Natal, the most noteworthy was one on "Education from a Physiologist's Point of View." With this he may be said to have inaugurated his appointment

to the office of Superintendent, for it was given in the Government schoolroom at Maritzburg only two days before he started on his first journey of inspection. It had been most carefully prepared, as a complete syllabus of it among the papers he left undestroyed still shows. I may mention also a series of lectures delivered in Maritzburg in 1861, which were upon subjects connected with Health ; and yet another series on Physical Geography. These last were given by him weekly to the boys of the High School, Maritzburg, in 1863, during the first six months of the school's existence.

I am here reminded that, in enumerating the occupations of his Ventnor life, I have omitted his lecturing many times to, and for the benefit of, the Mechanics' Institute (as I think it is called) which was in existence in the town. On one occasion, too, he accompanied our friend Mr. White on a visit to Mr. Macready at Sherborne, in order to give a lecture to a similar institution which had been established there by the great actor.

The Meteorological Observations, begun at Ekukanyeni, were continued without interruption at Maritzburg until the day that we left it. Every three months the tabulated records of them were copied and sent home to the Board of Trade. By means of these observations Dr. Mann was able by degrees to supply the inhabitants of the Colony with those precise and reliable data as to the character of its climate, which the mere impressions and recollections of individuals are insuffi-

cient to furnish. In 1863 he printed at Maritzburg an abstract of his previous five years' observations. The severe thunderstorms, to which Natal is liable during its wet season, were at once of the greatest interest to him, as might well be the case with one fresh from reviewing De la Rive's great work on electricity. He at once applied himself to the observation and study of them, and to the subject of the protection of buildings from lightning. He strongly advocated protection in the case of all dwelling-houses, and induced many of their owners to put up lightning-rods. He also introduced a knowledge of the right principles on which to construct and erect them, those employed before his time being mostly faulty in both respects. By degrees he became the referee of, I think I may say, the whole Colony in this matter; and during the time of his residence in Maritzburg the number of lightning-rods was so much increased, it was the impression of some of its older inhabitants, that the storms over the city were less frequent and less severe than in the earlier years to which their recollections went back. Serious accidents from lightning did necessarily occur at times in different parts of the Colony. All such injuries were sure to be reported to Dr. Mann, and many illustrations of the effects of the electric fluid on various objects were sent to him.

His own hopes and aspirations in Astronomy were not fully realised until nearly the last year of our colonial life. Then, at length, he was able to gratify

himself with the long-coveted possession of a solidly-built and conveniently-appointed observatory. He had it erected within his own garden, which was large enough to afford him a full sweep of the heavens, and in this the astronomical clock, which hitherto had been on the wall of his study, was at length duly deposited in its own specially-designed recess. He now began to have full enjoyment of his instruments, and trusted before long to take in hand some special and systematic observations. But the time he was to remain in Natal, though he knew it not, was fast running out, and all that he accomplished—and this only in the last weeks of it, when he had the able assistance of his namesake and friend Mr. W. Mann, of the Cape, then a visitor to the Colony in search of health—was getting his transit accurately in place, and making observations with a view to determining the latitude and longitude of Maritzburg. But he had some glorious revelations of depths on depths of space in those still, wondrously clear, whilst intensely dark nights which occur from time to time during the hot season. Then, to as far as the highest powers of his telescope could reach, the blackness appeared as if powdered with shining dust, of ever finer and finer dimensions, but in ever the same measureless quantity.

At Photography he worked indefatigably from first to last of his life in Natal. The practice of this art was often rendered difficult from chemicals spoiling with the heat of the climate, and very laborious from the

additional personal fatigue produced by the same cause; yet his interest and industry with it only increased. He amassed by degrees a large collection both of views and portraits, and of the last formed a very interesting and important series in connection with the Natal contribution to the great Exhibition of 1862. In preparation for, and to form a portion of this, he took portraits of all natives from whom he could obtain sittings, whose features or dress illustrated any peculiarity of tribe or race, and thus secured a large number of Zulu and other Kafir portraits. This was but a very small part, however, of the work he did for the Colony in behalf of the Exhibition of 1862. I cannot better indicate his position in the matter than by taking from the *Natal Mercury* of September 1886 its words in relation to this work; while to myself it cannot but be a pleasure to quote the recognition they contain of services rendered so long ago. They are: "He was the presiding spirit in organising the Natal Court at the London Exhibition of 1862." And the reference of the *Times of Natal* to the same event is: "He was secretary to the Exhibition Commission of 1862, in which capacity he rendered very great service to this colony, as will be seen by reference to the catalogue of exhibits drawn up by him." Of this, a descriptive catalogue, as far as I am aware I do not possess a copy; but I have been recently told that it was found, by one who read it at the time, to give a very complete picture of what the Colony had done and what it was aiming at in the way

of production. I have a lively recollection of some of the work of collecting the exhibits, particularly of the arranging for, and carrying out, an exhibition of them at Durban before they were finally packed for shipment. This great amount of work, over and above what was unavoidable, was entirely, I think, of Dr. Mann's suggesting, and he took the chief direction and management of it, with a result that well satisfied him. The exhibition was a decided success in the interest and pleasure it excited. There was a partial exhibition in Maritzburg also ; and thus colonists had the opportunity to see for themselves what Natal would contribute to the great World Show in London.

The work for this exhibition was perhaps the most important, apart from that of his special office, which he performed for the Colony under appointment from Government, during his residence there. But it was far from standing by itself, for he was constantly employed on commissions of inquiry and investigation ; as a member of boards, permanent and other, such as the Immigration Board ; indeed, in more ways than space allows me to name ; and in every case where a report had to be furnished, he was pretty sure to be the writer of it. A series of official letters still attest his appointments and services in these respects. After a time, too, the Government was not the only source whence occupation of a somewhat public character came to him. In June 1861 he was elected, and again in January 1863 re-elected, a Director of the Natal Bank, the oldest

establishment of the kind in the Colony, and the one with which Government money was deposited. At the time of his first election, it was in a very flourishing condition, and so it continued until 1865, when evil days financially began to set in. The first pressure of these he was called upon to deal with in concert with his co-directors, and I think I am right in saying that they formed a high opinion of the prudence and judgment he brought to the assistance of their deliberations, and also in regarding this as the first great opportunity he had of showing that, though pre-eminently a man of science, he was also a good man of business. Indeed, by those who knew him best, I shall hardly be accused of exaggeration when I venture to assert that the various kinds of work which, as life went on, he was called to carry out or to assist in, did but serve to exhibit the many capabilities of which he was possessed. In each occupation he displayed the capacity which gave a mark of comprehensiveness to his conduct of it, or which made his co-operation valuable to those with whom he might be associated. Perhaps this estimate of him were best, as it certainly would be most briefly, summed up in the statement that he was an able man.

Multifarious, however, as were his other occupations, it must not be supposed that literature went wholly to the wall. On the contrary, in 1859, the year of the Guide-Book, he began writing for Jarrolds the second part of the series of tracts ultimately collected as *Science for the Household*, and by the end of it had

written four out of the six which formed the second volume, entitled *The Atoms and Electric Forces of the Earth*, that is "Mass and its Might," "Expansive Heat," "Thunder and Lightning," and the "Lightning Rod." The two remaining ones, "The Lightning harnessed for Useful Work" and "The Lightning guiding the Mariner" were completed early in 1860. Another tract, called *Hints to Emigrants' Wives*, was also written in 1859, as a sort of supplement, if I remember right, to the Guide-Book. In 1860 the *Medicine for Emergencies*, already spoken of, was finally prepared for the press, and five tracts of a series on Physiology were also written. The three first dealt with *The Raw Material of Life*, the fourth with the *Composition and Chemistry of the Soil*, and the fifth with *The Plant in Infancy and Growth*. These were followed in 1861 by *The Plant in Maturity and Age, The Living Blood, Food and Digestion, Circulation and Respiration, The Conditions of Health and the Causes of Disease*. In this series, in which he broke quite new ground, he went a little faster in presenting science to the working classes than his publishers found profitable, and the three last-named of these tracts were not published until 1869. They then appeared with the preceding six as one volume, entitled *Elementary Introduction to Physiological Science*, divided into three sections of "Chemistry of Living Structure," "Vegetable Organisation," and "Animal Organisation." The three sections were also issued separately under the heading of *Physiology for the Household*.

The life of multifold activities which I have been describing was brought to an end in 1866, in consequence of Dr. Mann being instructed to repair to England to undertake special work for the Colony at home. In February 1865, in the annual report of the Immigration Board—which, as usual, it fell to his share to draw up—extended action had been recommended, and in the following August the Legislative Council, then in session, recommended that Dr. Mann should be sent home for two years as its special Emigration Agent. The recommendation was approved by the then administrator of the Government, and in December he received leave of absence from his post of Superintendent of Education to enable him to act upon it. The following April, therefore, saw us on the way to England, and in May we arrived there, nine years all but two months from our leaving it. My husband returned to undertake for Natal even more arduous and anxious work than he had been engaged with in the Colony itself, and threw himself into it from the moment of landing with the whole-heartedness and the comprehensive outlook which marked his acceptance of every responsibility. He had a considerable difficulty to overcome at the outset, in getting Her Majesty's Emigration Commissioners to approve and accept of the scheme he thought practicable and the most desirable in the circumstances of the Colony. He succeeded in this to the utmost of his expectations, and then got his work in full train, having meanwhile been

preparing a pamphlet that might serve as the general handbook of reference for intending emigrants, and in every possible way, such as by reading papers before the British Association at Nottingham, bringing Natal into notice. And now, during the next two years and a half, he travelled over many parts of England, into Scotland, and to Ireland, to open out and put himself in communication with centres and localities likely to furnish emigrants of the right class. During these journeys he frequently delivered lectures on the Colony.

The amount of office-work that was being continuously carried on at the same time I have been made aware of, in a mass of papers and letters which it has taken me weeks to look through, before venturing to tear them up as waste-paper. While doing this, I was constantly coming upon proofs of the individual care and interest bestowed by him upon those who did emigrate under his auspices, this being testified to in many cases in terms of grateful acknowledgment, and even of surprise as at quite unexpected kindness. The same has been borne witness to in one of the obituary notices in the Natal papers to which I have before referred; and again I quote what confirms, twenty years after, the correctness of the impression made on me by letters written about that time. After mentioning that in 1866 Dr. Mann was appointed Agent for Immigration, the *Times of Natal* says: "Of the numerous applicants for passages to this colony, many will bear testimony to the valuable assistance rendered to them when leaving

their native country, and the extremely kind way he had of soothing all the anxieties under which they laboured."

Though the success of his work, measured by the numbers who were induced through his agency to betake themselves to Natal, might not have been thought great, it was fairly equal to his own expectations; but in the then financial condition of the colony, which had gone from bad to worse year by year since 1865, it did not appear to the Legislative Council that the result was equal to the money expended on it. Therefore, in their session of 1869, they declined to pass the annual grant for immigration purposes; and in consequence, in the November of that year, my husband suddenly received orders from the Natal Government to close his office and discontinue his agency. At the same time he was granted a year's leave of absence as Superintendent of Education, on half salary. These instructions he carried out at the end of the year, and then deposited with Her Majesty's Emigration Commissioners all pamphlets, circulars, etc., that could be of service in their department, arranging with them to be at their command as long as he was within reach whenever they might require assistance from him, and assuring the Colonial Government that "I shall have very great pleasure in doing everything in my power to render them help." An undertaking that he must have fully carried out: for in May 1872 special thanks were sent to him by the Natal Government, "for the kind and gratuitous exertions you continue to make to supply a

good class of immigrants to the colony;"[1] and again as late as March 1874, when the Colonial Secretary notifies to him that a special Emigration Agent has once more been appointed, who will take all the duties "which you have lately and so kindly undertaken," there follows "for which, and many other kind offices you have performed for this Colony, I am to convey to you the thanks of this Government."

Before six months of the leave which had been granted him on the withdrawal of his appointment as Emigration Agent had expired, he had decided not to return to Natal. He doubted his ability to encounter again the physical exertion attendant upon the office of Superintendent of Education, and this doubt was confirmed by his old friend, Dr. C. J. B. Williams, whom he consulted on the subject. In April, therefore, he sent in his resignation to the Natal Government. It was accepted with regret, and the Colonial Secretary added; "I am to express on behalf of this Government the high sense which his Excellency entertains of the zeal and ability which you have uniformly evinced in the discharge of the important offices committed to you during the period of your service under Government, both in Natal and in England." But though considerations of health were the main cause of the decision he had come to, other reasons combined to produce it. The then almost bankrupt condition of the Colony made

[1] From March 1873, on the recommendation of the Immigration Board of Natal, he received "the sum of one pound sterling for each statute adult Immigrant embarked, in lieu of all expenses."

it certain that he would have to resume his work of Superintendent with less chance than ever of the expansion in it he was already so much desiring at the time he returned to England; that he would have been crippled by the refusal of additional grants, where he had long before felt that command of increased means had become indispensable to the satisfactory tenure of his office. This circumstance would have produced mental vexation more injurious than over physical strain, whilst augmenting the effect of it.

During the years that he had now been absent from Natal, he had been kept fully alive to the insufficient means placed at the service of the head of the Education Department, by means of the constant correspondence maintained with him by Mr. Warwick Brooks, the gentleman whom he was allowed to designate as his *locum-tenens* when sent home as Emigration Agent. Mr. Brooks had cordially accepted the position of temporary occupant of the Superintendentship, and loyally carried out, as far as possible, what he knew to be the principles and aims of the friend he represented. But he had almost from the first to be content to work financially just where he took up the task deputed to him, and, therefore, to work under discouraging circumstances. He could have had no easy task anyhow to attempt to fill the place of one so heartily liked as my husband had been by those he superintended. In proof of this I will here introduce a letter from a female teacher, who had conducted a small school in one of the coast settlements

ever since Dr. Mann took office. Writing to him on the 25th of January 1866, after a request for books for her school, she says, "Is it true that you are about leaving for England? And who are we to have in your place? I well remember how nervously afraid I was of you before I saw you—the dark stern man that my imagination had pictured. I can scarcely hope to receive the kind encouragement from another that you have ever given me. It seems quite a trial to lose you. I shall ever remember you with grateful affection. May every blessing attend your steps."

The all but bankrupt condition of Natal in 1869 had certainly been emphasised to Dr. Mann in the treatment he then received, when all further money for Emigration purposes was abruptly refused by the Legislative Council of the Colony, and the withdrawal of his salary and appointment as Agent became in consequence imperative on the Government. This, too, without a word of recognition, as far as I remember, from the chosen representatives of its inhabitants, of the work he had untiringly, and as he could not but feel, not all unsatisfactorily and ineffectually carried out. So abrupt a procedure and so curt a dismissal from one post gave him but little reason to suppose that the claims of the other, to which he might now have returned, would have received much consideration at their hands. But though my husband, in consequence of all the circumstances just related, resigned the office of Superintendent of Education in 1870, he continued for many years to

show his interest in the progress of his old work in Natal, and to aid in furthering it whenever opportunity offered. Thus he many times selected, or assisted in selecting, teachers for its schools, generally by special request from the Colonial Government; for, as the monetary crisis passed away, the grants for educational purposes became less stinted. Whenever he did so, and at the same time had much communication with the individuals chosen, he showed the most kindly concern for them and their interests, arranging for them any difficulties they might have to meet in regard of passages, money, and private family affairs. From 1873 to as late as 1878 his help continued to be thus sought and given. In the last-named year he was specially requested to select, in conjunction with another gentleman, teachers for two of the primary schools; and the request was signed, as Secretary to the Council of Education, by one of the few first-class teachers Dr. Mann secured during his personal tenure of office,—the Mr. Russell mentioned in his last report as on his way out, and who did not reach the Colony until after we had left it.

He was meanwhile, and throughout the year in which he finally separated himself from office in Natal, still in reality working for that colony. He had been introduced to the "Natal Land and Colonisation Company" at the time of his return home, through an old Natal friend who was on its directory; and when it was known that his Government appointment was about to lapse, this Company at once engaged him to undertake for

it, for the year he was still allowed to remain in England, the same work of promoting emigration to its estates he had been doing as Agent for the Colony at large. At the end of this time the result did not justify the Company in continuing the expenditure as before. For yet another year, however, they retained Dr. Mann's services at a reduced salary, and then parted with them with expressions of cordial appreciation of what he had done.

And now, in 1872, my husband was once more almost without income but such as he could secure by the use of his pen and by practice amongst a few personal friends. But so prudently had he husbanded his earnings while they were certain and more than sufficient, that he was not for a moment harassed by monetary difficulties, though of necessity feeling the strain of only a precarious income to rely upon more heavy than at a younger age. Happily the full burden of this was not of very long continuance, as, from my side, a measure of certain income accrued to us within two years. That he met it whilst it lasted, as before, by being only the more diligent in putting his hand to every form of work in which he could assist, or by which he could make some addition to our means, is shown by my having no recollection now, as I had no sense at the time, that he was more at leisure when he was no longer holding a special appointment than when he was.

The International Exhibitions, which were held in

London after 1870, were nearly all of them occasions of some co-operation or assistance on his part, especially if anything was to be done in behalf of Natal. But in order not to omit his most conspicuous work in this respect, after that accomplished in 1862, I must go back to the Paris Exhibition of 1867. Then, in the midst of all he was carrying on as Emigration Agent, he took the brunt of what had to be done in Paris, in unpacking and determining the arrangement of the exhibits sent there from the Colony. This proved from various causes a most troublesome and laborious task, such as taxed his bodily strength as well as his capacity to meet and overcome difficulties ; that of very limited funds, the consequence of the finances of Natal being then at low water, being always present as an insurmountable one. It was bitter March weather when he visited Paris on this work, and he spent hours of every day toiling in the cold of the Exhibition building, amid a chaos of cases and of perpetually occurring hindrances in getting them and their contents in place, returning to his hotel in the evening to write long letters of instruction to the young clerk left to represent him at the office in London. In turning over his papers I came upon a large bundle of letters on thin foreign paper, written by him in the most beautiful, legible hand, the writing so perfect indeed that I could but admire it. On examination I found that these sheets were all addressed to his young clerk, and contained instructions as to every matter he had reported to him. I never saw such hand-

writing by my husband anywhere else, except perhaps in a page or two copied for some special purpose, and I was struck by the extreme painstaking it exhibited. It was as if every letter had been carefully formed, so that the young subordinate should have no excuse for not making out his chief's instructions, through inability to decipher them ; and as I know how alien it was to my husband to give special attention to a mechanical act so constantly practised as writing, I know also that there must have been a ceaseless effort while penning these letters to keep this point in mind. Indeed, in this trifling matter, as it may well be deemed, I see an illustration of his "infinite capacity for taking pains," which is, I think, Mr. Ruskin's definition of genius. I remember that when my husband was asked if he would accept it as a good and sufficient one, he demurred to doing so, and it could hardly have been otherwise. He knew himself to be no genius; he had no reason to doubt that he had an infinite capacity for taking pains. This Exhibition, indeed, made demands upon the capacity in other and larger ways, and his work for it I recall as almost the most arduous and harassing of the kind he ever went through.

His connection with the International Exhibitions was not confined to those in which some service could be rendered to Natal. He was specially concerned in the Loan Exhibition of 1876, was on one of its committees, and took part in many of the Conferences connected with it. To come to quite recent years, he

acted as a juror in the Health Exhibition of 1884, and about the same time in the same capacity to one held at the Crystal Palace ; in both cases encountering fatigue that told injuriously on his health. In 1874 he was a member of the committee appointed by the Society of Arts to inquire into the Economical Use of Fuel, and attended constantly for several weeks the testings of stoves which went on at South Kensington for that purpose. His relations with this Society began soon after his return home ; in the first place, with his reading papers at its rooms on such subjects as "The Climate and Industrial Prospects of Natal,"—this being one of the means afforded him of bringing that colony into notice. He thus made the acquaintance, which became in time the friendship, of the then Secretary of the Society, Mr. Le Neve Foster, and of his Assistant-Secretary, now his successor, Mr. H. Trueman Wood. In 1874 he became himself one of its paid officers, being appointed Secretary to the African section, as it was then named, which became subsequently the Colonial and Foreign, and soon after made himself a life member. This appointment he only resigned about two months before his death, when he was unanimously nominated a Member of Council, and his services as sectional secretary were very handsomely acknowledged.

One of the most prized pleasures, which his return from Natal and residence in or near London put within his reach, was the opportunity of association with, and attendance at, the Scientific Societies. He had been a

member of the Royal Astronomical since 1853; he joined the Royal Geographical in 1866, and read before it a paper on Natal, then so little known, in the hope thereby to further the special mission for it with which he was then entrusted; and at the same time the Ethnographical also, making it too serve the purpose of exciting interest in the Colony. He became a member of the Meteorological Society in the following year (1867), and was shortly after elected on its Council. He next became one of its vice-presidents, and finally, in 1873, its President, an office he held for three terms, until 1876. From the time of being on the Council, he scarcely missed a meeting of the Society, and I think not one during his presidentship, unless he were away from home. That he should be at his post appeared to me to be regarded as an imperative duty, and the duty was always performed with eagerness and pleasure. The objects of this Society were naturally of exceeding interest to him, from his long devotion to meteorological observations in Natal. The Photographic Society was another which he joined soon after coming home, in which he took great interest, and for which at one time he did a considerable amount of work in the effort to place its finances on a sounder basis.

But of all the scientific associations in the metropolis, the one which attracted him the most was the Royal Institution. In 1870, when his emigration work for the colony ceased, he attended a course of lectures which Professor Tyndall gave that year on Electricity, and in

subsequent years many other courses by that and other distinguished lecturers. At these too, if attendance was once begun, it was never omitted on any but unavoidable grounds; absence from home, indeed, was regulated with a view to not missing one of a series. But it was 1876 before he became a member, a delay, the result, I believe, of his not having thought himself at liberty to indulge sooner in so costly a luxury. From this time, the Friday evening addresses, in addition to the many series of lectures the Institution provided, became one of his most keenly enjoyed pleasures, which he was indefatigable in pursuing. The fatigue and exposure to night air during the worst months of the year which he thus encountered, and in attending the Cantor Lectures at the Society of Arts, at which he was no less constant, appeared a great risk to his health. But his lively interest in the opportunities thus given him of being abreast in many departments of science with the most advanced knowledge of the day, made him unmindful of the strain upon his bodily powers. All of which meant that the love of knowledge was paramount with him in advanced life, as it had been in youth. It had, indeed, but deepened and strengthened with age. Besides being a Member of the Royal Institution, he was on its Board of Visitors, with the exception of one year, from 1881 to the time of his death.

Great and foremost in his esteem as were the pleasures derived from science, I should most imperfectly present my husband as he was, did I omit to mention

how keenly alive he was also to those arising from other sources so different from it, as music, poetry, the drama, and literature in general. Of all these he was at all times a glad partaker. Music, especially that of the oratorio and the opera, gave him very high enjoyment. I have seen, since his death, a letter he wrote to his sister in 1845, after hearing Haydn's "Seasons," in which he gives a very complete analysis and description of that work. But for its length, I would gladly extract the whole, and also his remarks on parts of the "Messiah," heard at the same time, for they show that he possessed a sensitive appreciation of music, whether employed to express emotions or natural scenes and incidents. In quite recent years he was still capable of so much interest in this delightful art as to make a point of going to hear one of Wagner's operas, and, more surprising still perhaps, he admired it very much. Indeed he did not seem to find any difficulty in at once accepting and enjoying the "music of the future."

In regard to the drama he was fortunate; for his student days in London were coincident with the Macready revivals, of which he saw the greater number. He always described them as representations of Shakespeare which he had enjoyed enthusiastically, and never ceased to have pleasure in recalling the great actor in his most famous parts, in all which, I think, he had seen him. On our return from Natal, the opportunity of once more hearing music and seeing plays acted, from which to all but a most limited degree we had been shut

out during our residence there, was greatly enjoyed ; and naturally the pleasure thus afforded was frequently sought. Even to the last year of his life, my husband had the spirit and energy to go some distance and meet considerable fatigue to hear a fine band perform, or to see a new play that was exciting general interest. I mention this as evidence of the natural cheerfulness which made him ready to enjoy as well as to endure.

His championship of the Laureate's *Maud*, and the approval it received from the one most fit to pronounce upon the success of that deed of literary prowess, are sufficient, I think, to prove that he had "a soul attuned to poesy." Indeed science could hardly have aroused in him the vivid enthusiasm it did if this had not been the case. In general literature, perhaps, history and fiction attracted him the most ; at least of late years his reading was more constantly in these two branches than any others. He continued to the last, what he had been from a boy, a great reader. He had always several books on hand at the same time, and life without books he used to speak of as a condition not to be conceived by him as endurable. I have often heard him pity horses having to stand for hours in their stalls, because they could not have books. The recollection of this needless, half-jesting pity leads me to mention that, as might be expected in one so kindly natured, he was fond of animals, and they of him. He could always make friends with dogs, even those not inclined to be sociable. Parrots and he appeared to have an instinctive understanding of one

another; the result, on their part, it seemed to me, of his never showing any fear of their cruel beaks. There was evidently also a fascination for them in a droll way he had of talking with them. Drollery, indeed, was often indulged in by him with human beings as well as animals. He could be very playful and amusing with children, poking fun at them in a way they liked, or going through some grotesque hocus-pocus by which they were delightfully mystified. He had, altogether, for one whose favourite pursuits were of so grave a kind, a great love of fun, and this was very apparent in his intercourse with some of his friends, one or two of whom in particular he could hardly meet but he must rally them good-humouredly. They were, as may be supposed, the friends with whom his relations were the most easy and cordial, the "chaffing" being in fact only a proof of the warm regard he entertained for, and believed to be reciprocated by, them, as his love of fun was but an index of his kindly, cheerful nature.

From the time that my husband ceased to have regular office-work he lectured somewhat frequently in the neighbourhood in which he resided, in behalf of schools and other local institutions, sometimes indeed going beyond his immediate district. He chose subjects connected with Astronomical Science, including the Spectroscope, inventions—such as the Telegraph and the Telephone, the Microphone, and the Phonograph, at the time that they were first engaging public attention—the Electric Light, and occasionally a physio-

logical subject. All were illustrated either by large drawings made by himself, by lantern slides, or by the instruments themselves; each method involving a considerable amount of preparation. He generally succeeded in interesting his audiences in the subjects he brought before them, and in leaving them with the impression that much not easy to explain had been dealt with simply and clearly. In some cases, particularly in all connected with Astronomy, he also impressed them with his own profound interest, amounting to enthusiasm, for the subject-matter of which he was treating. He undoubtedly possessed a natural readiness of speech, so that I never remember him at a loss for appropriate phrases, or indeed otherwise than rather happy in what he said, even when unexpectedly called upon to express the sentiments proper to an occasion. But, in the case of those subjects which interested him deeply he had the power not only to tell clearly what he knew about them, but also to speak eloquently upon them. This power came out at times with striking effect in his lectures, and by some of his friends was recognised as lending a great charm to their private and personal intercourse with him.

Of the work he did in lecturing, a large collection of MS. notes, in each case carefully prepared, and many rolls of drawings, remain as proofs. Though all his lectures were thus prepared beforehand, yet, in delivering them, he seldom reached the end of his syllabus, his great difficulty, as he always said, being not to give too

much time to one or more portions of his subject, to allow of the whole being treated as intended. That is, he never became a practical lecturer, never had sufficient of regular practice, as such, to have a perfect mastery of the words in which he clothed his thoughts, or of the extent to which he dwelt on each. I always regretted that he had not, as I think there was in him the making of a first-class lecturer, with perhaps an unusual amount of some of the qualities which go to form one. Foremost among these I put his power of conveying an impression of the exceeding interest, the beauty, or the value of the knowledge he was communicating, and of thus awakening in his audience some of the enthusiasm with which he himself regarded it. I think also he had a talent for putting difficult things plainly, and, while his lecturing power was at its best, that most of his hearers would have agreed with me that they listened to him with pleasure, and learnt from him with certainty, as one rarely does but in the case of practised and accomplished lecturers. Latterly, the exertion attendant upon the occupation made too great a demand upon his physical powers, standing and using his lungs at the same time being beyond his strength, as I, if a listener, was made aware by the diminished ease and command of language with which he handled his subject. Yet in these cases I have found that my disappointment, the result of comparing his success now with what it used to be, was by no means shared by others of his audience. Not till quite the last years of his life, however, did he

discontinue the practice of lecturing, and decline requests to give assistance in that way.

Lectures were by no means the only mode in which he was willing to make himself useful in his own neighbourhood—that is, in the Battersea and Wandsworth district, in which he resided from 1872. He served it from first to last in several ways. In the year just mentioned he was appointed a manager of the Landseer Street Board School, Battersea Park, an additional manager in 1874, and he only resigned his connection with it in 1877, having all that while been a constant attendant at the Board Meetings of the school. He resigned because the distance from his home obliged him to use a train, and encounter waiting on a cold platform in winter evenings. At the time of doing so he signified his willingness to serve on the board of another school that meanwhile had been established close to his house, but the offer was not accepted. In 1873 he became a member of the committee of the Battersea Branch of the Charity Organisation Society, and in 1874 was put on its relief committee, when for some years he took his turn with other gentlemen of the district in giving attendance at it. He withdrew from this work after a time on the ground of advancing age, and that younger men should now take his place. In 1876 he was elected Poor Law Guardian of the parish of Battersea, and assiduously attended the weekly Board Meeting, and, on one other day of the week also, as a member of the Infirmary Committee. In this last

position it appeared to me that he, as a medical man, took the lion's share of the work. He gave most careful attention to the management of the Infirmary, a large one of 300 beds; his tact in handling individuals being constantly called into exercise to arrange difficulties with the nurses and other officials. The work was of a fatiguing kind, and it hardly need be said was in many respects disagreeable as well as troublesome. It was therefore a relief to him, and to myself also, when he escaped re-election in 1877, owing, it was thought, to offence given to the ratepayers by his action in the licensing question, and also in respect of a hospital for smallpox. He received "the hearty thanks of the Board of Guardians for his very valuable services" during the year he was in office.

When a Provident Dispensary was started in Battersea he became a member of it, and attended its meetings for many years. He withdrew from it in 1878, and assisted in the starting and establishment of a similar institution—the Wandsworth Common Provident Dispensary—in close proximity to his own home. To this he gave his services until 1883. From the first he assisted Canon Erskine Clarke in the establishment of Bolingbroke House Pay Hospital, and was a member of its managing committee up to nearly the last year of his life. He was placed on the council of St. John's Training College, Battersea, in 1874, and on that of Whitelands Training College, Chelsea, in 1881, and was still a member of both at the time of his death. From

the Councils of both I have since received expressions of regret for the loss of his services. These two colleges were among the Institutions in whose behalf some of the lectures already referred to were given. In the spring of 1876, by special arrangement with the principal, Dr. Mann delivered a course of lectures on Chemistry, as introductory to Physiology, to the students of Whitelands College. At St. John's College he lectured from time to time on detached subjects. Of these lectures, its Principal, when writing to me after his death, says : "Our students enjoyed his lectures as a great intellectual treat, and often used to beg me to ask him to repeat his kindness. Had I followed my own inclination I should have more frequently complied with their request, but I knew how much such lectures must have exhausted him, and his readiness to oblige us made me the more reluctant to take advantage of it."

One more appointment of a public character he held from 1879, when he was made the Government nominee of the Board of Conservators for Wandsworth Common. He had just been re-nominated for the third time, when his death took place. From this body also I have received a gratifying expression of the esteem in which he was held by his colleagues.

Such from 1872 was the work my husband did outside his home. It was all done with cheerful goodwill, and much of it with the alacrity and devotion he always bestowed on that which specially awakened his interest. I have already shown how even the occupa-

tions which might be regarded chiefly as the pastimes of his life, he made into somewhat hard work for himself. I could show how, in behalf of his friends, he was at all times ready to meet great physical exertion, particularly in cases where they looked to him for medical help, and which, therefore, involved likewise responsibility and mental strain. But no friends of his need be told that his whole force both of body and mind was at their service. What I have yet to show is the continued work he was all along doing within his home: that which made the back-bone, as I may say, of it; the work with brain and pen he never ceased to carry on, and the more persistently from its becoming again for a while his chief source of livelihood. This will be done by stating, as far as I can, what books he wrote and published, and to what journals and reviews he contributed from the time he ceased to hold any special appointment. Indeed, I may begin a little further back, as, besides writing the Emigration pamphlet on Natal for the Colonial Government in 1866, he in the same year wrote another for the service of the Natal Land and Colonisation Company, and in the following yet another on the same subject for Messrs. Virtue and Co., called *The Emigrant's Guide to Natal.* This appeared as one of Weales' Series, at that time in the hands of the above-named firm, and was revised by him in 1873, when the series had passed into the Lockwoods' hands. Once again, as long after as the year 1875, his pen was employed in a similar way, when he

edited for Mr. H. Brooks his work on Natal, being a *History and Description of the Colony.* In fact, he all but entirely re-wrote the MSS. submitted to him, as well as added largely to them. In 1876 he assisted the Principal of Whitelands College in the production of a series of Reading Books for schools, and wrote Standard III of the set. In connection with this undertaking he was engaged in 1877 in preparing a work treating of Domestic Economy in all its branches, which was to have formed Standard VI, the last and highest of the series. When it was finished, the Editor declined it, as somewhat above the mark of what he thought desirable; and my husband thereupon decided to publish it as an independent work, under the title of *Domestic Economy and Household Science,* and as such it was brought out by his friend Mr. Stanford. I am here reminded that to a small collection of tracts, issued about this time by the same publisher, and called *Simple Lessons for Home Use,* he contributed one "On Drink," and one "On Weather."

The two articles from his pen on "The Plurality of Worlds" and on "De la Rive's Electricity," which had appeared in the *Edinburgh Review* before he went to Natal, were not followed by any others until 1872. But in, and subsequent to, that year he contributed as many as nineteen articles on the following subjects: "Researches on Life and Disease," in the July number for 1872; "Approaching Transit of Venus," in July 1873; "Nasmyth's Physical History of the Moon," in

July 1874; "Comets and Meteors," in October 1874; "Physiological Influence of Alcohol," in July 1875; "Mental Physiology," in January 1879; "Electric Light," in April 1879; "Philosophy of Colour," in October 1879; "Mind in the Lower Animals," in July 1880; "Darwin on the Movements of Plants," in April 1881; "The Storage of Electricity," in July 1881; "Helmholtz and Carter on Eyesight," in October 1881; "Electro-motive Power," in January 1882; "Siemens' Theory of Solar Heat," in July 1882; "Sir John Lubbock on Bees and Ants," in October 1882; "Recent State of Medical Science," in April 1883; "Unity of Nature," by the Duke of Argyll, in April 1884; "Life and Work of Pasteur," in October 1885; and "Recent Progress of Astronomy," in April 1886. This last, which was a review of Miss Clarke's *History of Astronomy*, and of Dr., now Sir R. Ball's *Story of the Heavens*, was indeed the last piece of purely literary work which he accomplished. He had just completed writing the article in the rough, as he was wont to do in the case of contributions to the *Edinburgh*, with a view to the consideration of length, when the first attack in the lungs occurred, which was the precursor of the end.

In 1878 he was applied to by Dr. Robert Brown, the editor of *Science for All*, then being issued by Messrs. Cassell, Petter, and Galpin, to furnish a series of papers on Meteorological Subjects. He gladly agreed to do so, and, in the end, contributed to the five volumes, of which the work consisted, as many as eighteen papers,

all except the two last dealing with Meteorology; and thus embracing pretty well every portion of the science. The two last papers are on "Voltaic Electricity" and on "The Great Voltaic Battery," that at the time (1881) had just been exhibited by Dr. de la Rue at the Royal Institution. While President of the Meteorological Society, his pen had of course been employed each year in preparing the usual annual address; and when, in 1879, the Society planned the delivery of a series of Lectures, to be given by some of its members, he took the first of them on "The Physical Properties of the Atmosphere." These lectures were subsequently published in a volume called *Modern Meteorology*. At the Society of Arts, too, he from time to time read papers on subjects connected with this science, such as the Lightning Rod. Indeed, the protection of buildings from lightning, to which his attention had been first directed by his experience of the thunderstorms of Natal, remained to the end of his life a subject of prominent scientific interest and inquiry. He was always seeking, and taking note of, fresh information respecting it, and on more than one occasion I remember his receiving from the Government of India official communications of injuries done to buildings in that country, with plans attached, and requests for his opinion as to the cause of failure in the rod-protection that had been used.

Among papers he had put carefully aside is one which shows that, in the same high quarter, his knowledge of the subject was recognised as being valuable

for its accuracy and completeness. It is a letter dated February 1876, addressed to him, as President of the Meteorological Society, by "C. J. Dickens, Colonel, R.A.," to inform him, by the direction of the Governor-General, that his paper on "Practical Points connected with the Construction of Lightning Conductors,"—published in a specified number of the Meteorological Society's records—"has been read with great interest, and has been reprinted and circulated for the information and guidance of the Public Works Department of the Government of India." With Professor Melsens of Brussels he for several years kept up a correspondence on the same subject; and when, in 1875, we were in Brussels for about twenty-four hours, he spent some of them in inspecting, under the Professor's guidance, the whole of his arrangements for the protection of the Hôtel de Ville, to him a sight of more vivid interest than any other the city offered. And his last long undertaking of a literary character was the revising and editing for Mr. Richard Anderson his work on Lightning Conductors. This occupied him throughout the first half of 1885, and his work with it was not completely at an end until towards the close of that year, not very long before his health began to break down.

Another of his old subjects, to which he returned in these later years, was that of Physiology. He had, I think, written little or nothing upon it since the tracts for Jarrolds which appeared in 1869, when in 1881 he at last carried out the project he had long entertained

of treating the temperance question from a physiological point of view. He then wrote and published with Ward, Lock, and Co. the book which he styled *The Physiology of Food and Drink.* Once more the same science found him a willing worker in its service, when he furnished gratuitously to *The Philanthropist,* a journal just started by an acquaintance, a series of between twenty and thirty articles, on "The Structure and Functions of the Human Body, addressed to general readers." These were begun at the end of 1881, and completed at the end of 1883.

Already for some years, as I have shown, my husband had felt the need to contract the occupations which took him from home; and each year, latterly, it was evident that his power to bear muscular exertion was much and increasingly impaired. Quiet work at home of brain and pen was what it would have been well he should have restricted himself to, but this it was not in his nature to do, while strength to be active and of service to others remained. Thus the first serious attack in the lungs, which occurred in December 1885, arrested him suddenly in a life too busy for the physical resources he had to draw upon. For a while he was compelled to confine himself almost entirely to indoor occupations. But already, before his illness, the prospect had opened to him of being once more of service to the colony with which he been so long connected. He had been placed on the Natal committee for the approaching Colonial and Indian

Exhibition, and early in 1886 he provisionally promised Sir William Sargeaunt, the executive and royal Commisssioner for that Colony, to undertake the preparation of the Catalogue of the Natal Court. Before the materials for the commencement of this work were to hand, he had repetitions of the chest attack, and the last of these, which came at the end of March, was the most alarming and prostrating of all, the heart now showing itself to be seriously disordered, as well as the lungs gravely affected. The promise to Sir William had been made unknown to me, and I only became aware that it was to be kept, in spite of the illness which had supervened, by the arrival of the necessary papers and invoices. Even then it seemed to me that they must be sent back; that the conditions, under which alone he could be expected to fulfil his promise, were altogether wanting. He soon showed me that he entertained no such idea, for with every slight improvement in the state of the heart, and before any marked return of strength, he began the toilsome, troublesome work of classifying the different exhibits, named without any order in the heavy, cumbrous sheets of the ship-invoices. He meant to do the work, his heart was in it, the spirit rose to it, and gradually the bodily powers were renewed, as it seemed to me, by the impulse of the will. Day by day he grew able to sit at his desk for a few minutes longer at a time, and soon he found that I could share the work with him, and give him effectual help. Much of it consisted in the

constant turning backwards and forwards of huge, unwieldy sheets of paper, in order to make sorted notes of the entries in them ; a fatiguing operation that was greatly lightened by two working together at it, and of which the least important was the most laborious part, and therefore the one of which I could relieve him. It was my great happiness at the time that I could in this and other ways take part with him in a work on which his heart was evidently set, and it has become a greater happiness since I have had to experience that it was to be the last he was to accomplish in this world. I did not distinctly apprehend at the time that this was to be the case, nor do I think that the busy desk work was very harmful to him. He would rest well between the morning and evening spell of it which he took daily, he ate well, and his general symptoms improved altogether. But when to all this work at sorting and grouping, which involved close and repeated scrutiny to make sure that no single exhibit was omitted from the Catalogue, and no single one entered twice over, and to the correcting and revising of proofs which followed immediately, he added the paying of frequent visits to the Exhibition itself, as he did from just before its opening, no doubt it was at the expense of serious injury to his already broken health. For thus muscular strain and fatigue were encountered to a degree which, from his own interest in the whole of the grand collection, and still more from his too great readiness to share my interest in it, he would not fully recognise,

and that I, alas! greatly underrated until too late. Most of his time, however, was spent in the Natal Court, seeing that labels, agreeing in number and description with the Catalogue, had been duly affixed to the exhibits; and when this matter had been satisfactorily attended to, he took great pains to have the woods of the colony, which had been sent and marked in a way that made their identification difficult, sorted out into the sets specified in the Catalogue. Again and again he spent some hours at a stretch over this work, being more than once disappointed in getting the directions he had given as to arrangement carried out. Indeed, his last visit to the Exhibition, the Friday before his death, was entirely occupied with this matter. On my inquiring after his return, if this time he had succeeded in making the assistant understand how the woods should be arranged, he replied that he believed at last he had, that he had convinced the man that his instructions were not to be trifled with. He was never to see if his impression was correct, and never to see the last sheet of the second edition of the Catalogue, which had not yet come from the printers. He expected it up to the last postal delivery of Saturday, 31st July, and remarked, as it did not come then, that, as Monday was Bank Holiday, he was now safe from it until after Tuesday, for which day he held an invitation for himself and me, from the Union Steamship Company, to go round the Isle of Wight in one of their vessels.

On that Monday, 2d August 1886, he was seized,

just after twelve at noon, with paralysis, which disabled the right side, and left him all but speechless, though quite conscious. Before another twenty-four hours were gone, bronchitis had set in, and death became inevitable, as indeed I had felt it to be from the first. Nor could I even desire that it should be long delayed, so piteous was the condition he had to endure, and I to witness. It took place at eight o'clock on the morning of Wednesday the 4th, after hours of distressed and laboured breathing, happily, at the last, passed in unconsciousness by him. So rest from the occupations of this life came to his eager spirit, which could not but be actively engaged with them to the last—rest that often of late he must keenly have desired for it, as well as for the worn body it animated. On the following Monday, 9th August, that mortal part was laid in the grave he had chosen for it in the Kensal Green Cemetery, close to the last resting-place of an old and valued friend.

And now my task, the carrying out of which has been to me as the fulfilment of a sacred duty, is ended, in that I have sketched my husband's "life of noble endeavour and pure aim" [1] from first to last. But I know that it has been but feebly accomplished, in the respect in which I have been most anxious that it might be forcibly and adequately fulfilled—that of exhibiting the lovable, no less than the other fine qualities which

[1] His own description, in a paper too sacred for any eyes but my own, of the life which secures immortality in this world.

formed a part of his nature. His unceasing activity, his untiring diligence, his readiness to work for the good and in behalf of others, it has not been possible for me to fail in showing; but, as I have confined myself chiefly to the account of his public work and his work in science and literature, I have had but small opportunity to bring fully into view the many amiable social qualities by which he endeared himself to those who had the most intercourse with him—the kindliness, the helpfulness, in a word, the unselfishness that made consideration for others before himself the rule of his life. To these, and yet other points in his character, such ample testimony was spontaneously borne by his friends, in the letters they kindly addressed to me at the time of his death, that I cannot deny myself the pleasure of bringing out more clearly and completely the picture I have, I know, left indistinct and imperfect, by giving here some of the gratifying and appreciative estimates of him contained in these letters.

I begin with one from a friend occupying positions which make him possess as large an acquaintance as falls to the share of any individual not filling the highest of public stations, and that among the foremost in literature, science, and politics of the day. He, with this large field of comparison at command, writes: "Dr. Mann was the kindliest man I ever knew. His great acquirements were veiled by his entire modesty; he seemed to live chiefly to give pleasure to others, and to be of use to them."

This is the estimate of one of his own generation, of rather more advanced age than himself. I take next the expressions of two friends, each his junior by many years. The one says: "You know as well, or better than any of us, how universally he was beloved by all who knew him, and I hope you and he both knew with what sincere reverence and affection I myself regarded him. He was always kind, always helpful, and I feel that my very short list of intimate friends has been sorely reduced by his departure." The other says: "I feel that I have lost one who was one of the unselfish of this world, who was always ready to encourage and help younger men, and by his great stores of scientific knowledge, and his happy knack of easily imparting them, did give most efficient help to his many friends. It is seldom that such great talents are combined with entire unselfishness; for the last thing your husband ever thought of was his own interests."

Two octogenarian friends, whose friendship with my husband is most touchingly continued to myself, each wrote to me on hearing of his death. One, whose own feeble health obliged him to do so partly in pencil, speaks of him as "one of the few I found my dearest friends during a period of nearly fifty years, endeared by the kindest feelings, and by congenial tastes and pursuits, and strengthened by very many acts of mutual friendship. How many precious acts of kindness from your dear husband does my memory recall!" The

other, who had been a fast and true friend for more than forty years, describes it as "a severe task to write on the death of so good and great a friend;" and when saying that he shall esteem it a favour to have the opportunity to render me any service, gives as the ground of so kind a feeling, "as you are aware I have received from him no end of obligations quite beyond all repayment."

A friend of by comparison quite recent years, but highly and deservedly prized from first to last, after speaking of him as "so kind, so gracious, so gifted," and of "the deep respect entertained for him by so many friends, and their admiration for his great attainments and varied powers," says for himself: "I loved your husband, and had the profoundest admiration for him."

The Principal of an important educational Institution, able and indefatigable at his post, and a man of wide and varied culture, writes: "I shall always remember your husband with veneration and gratitude. It was a real delight to me to converse with him, and I have had many occasions on which I have been deeply indebted to him for most valuable suggestions and friendly counsel. Dr. Mann has left a world made better by his life and labours."

A Colonel of Engineers, whose friendship with my husband began in his subaltern days, when he was stationed at Maritzburg, and who never ceased to keep up communication with him, brings into view charac-

teristics not dwelt on by others, in the remark: "The loss of an old ally causes a sharp wrench, and it does not improve matters when one misses one of the happiest and most useful lives that one has known. It is not long since I had a letter full of enthusiasm for the Colonial Exhibition, such as a lad might have written in point of enjoyment."

A lady—our friendship with whom dates also from our Natal days—laments the death of "him who is ever present to me as 'Good Dr. Mann,' whose unwearying kindness and help was always ours."

Two friends belonging to our Natal days, and still resident in the Colony itself, sent me letters containing the following expressions: "We have lost a friend whom we not only valued but loved. . . . He was so unselfish and self-sacrificing, so loyal, and warm, and practical in his friendships, that his loss will be felt as the loss of no ordinary person, and this is exactly what we feel. . . . I thought it most generous and forgiving, and so worthy of, and like him, to give all the labour and trouble he did to the Natal Catalogue in the Exhibition, after the shabby treatment which the colony subjected him to in bygone years; he forgot and forgave, and this speciality will be one of the chief of the many virtues by which he will be remembered by many." This warmly appreciative estimate is from a very old and distinguished, but now retired member of the Civil Service, who for many years filled a most important post in the Natal Government. In quite the

same key writes the other friend, also an old member of the same service, and who has given all the best years of his life to the hard work of his colonial appointment. "This colony has a melancholy interest in the end of one who served it as your husband has done for thirty years. He was as familiar to all classes as household words, and his memory will long be held in reverence. The justice that is due to the life-long services he has rendered to Natal can never be awarded. He was devoted to us to the last."

The next extract I give as affording a remarkable illustration of my husband's power to attach others to himself. It is from the letter of a gentleman whose acquaintance he only made during the last months of his life, and then entirely in connection with public work. His words are: "I feel that it was a loss not to have known him personally and intimately for a much longer period than has been the case. It is not often that men of my own age form such an attachment as I had formed to your husband during our late intercourse. I mention the fact that you may believe somewhat of my grief that I should so soon have to give up the pleasure of an intercourse on which I had counted for years to come."

A lady, who had him for her referee in all difficult questions connected with the appointment she fills, writes thus of the nature of the assistance she received: "I have never had a friend so thorough in sympathy with—— (naming the association which she serves) as

your good and single-hearted husband. I could always trust his judgment, aye, and rely on him against my own special pleadings."

I cannot forbear, in conclusion of this perhaps too long series of extracts, expressive of the estimation in which my husband was held by those who were his friends, from adding yet another, which gives the opinion formed of him and of his work by one who never knew him personally. It is an opinion on which I may well set the highest value, since it is that of a lady whose name bends every heart in reverence for her and the "noble work" she has herself accomplished, and even now is carrying on. Just too late, alas! she had sought to associate my husband with her in one of her undertakings, and writes on learning that she is too late: "I feel the loss of Dr. Mann as a public loss —the loss of one who cannot be replaced;" and, "I grieve that I could not have his so great authority for our work in India. But what a noble work he has done! And I send his books to India. He is not dead!"

Should any of the friends, whose words I have ventured to reproduce, see these pages, doubtless each will recognise him and herself, but none will know the other. I trust, therefore, it will not be felt that I have violated confidence in availing myself of their help to render more complete my sketch of the husband, whose companionship ennobled existence to me for not far short of forty years, and the memory of whose life and

love is a yet more quickening, all-pervading influence now that sensible communion has become impossible.

"And, doubtless, unto thee is given
A life that bears immortal fruit
In such great offices as suit
The full-grown energies of heaven."
—*In Memoriam.*

FEBRUARY 1888.

APPENDIX TO PAGE 64

THE first portion of the Report consists of a tabular statement of the locality, attendance, and income of the 65 schools which were in operation in Natal at the end of the year 1865. Dr. Mann then proceeds, in numbered paragraphs, to furnish a summary of these and of other particulars respecting them, and at paragraph 11 writes thus: "Six years and a half ago, when first a Superintendent of Education was appointed for the colony of Natal, there were 2 Government schools in operation, with an attendance of 218 pupils. . . . At the same time there were 9 schools which received annual grants-in-aid from the Government. . . . They had collectively an attendance of 258 pupils." A previous paragraph had stated that the attendance at the 65 schools in operation in 1865 was 1744. Paragraph 12 deals with the subject of religious instruction in the Government schools, and mentions that from the first they had been "simply schools for secular instruction," that the religious had been "left to be superadded by the parent," and that the arrangement was "entirely satisfactory where schools are held, as in these instances, in large towns." This important subject is thus pursued in paragraph 13:—

"In the aided public schools, on the other hand, religious instruction is very commonly given, in addition to the secular work of the classes, the only requirement being

that no pupil shall be constrained to receive instruction which is disapproved by the parent, and that no child shall be excluded from the benefits of a school which is in receipt of a public stipend, for conscience sake. The immediate result of this arrangement is the securing the willing and hearty co-operation of persons of strong religious sentiment and bias in the work of public instruction—a very important consequence in a thinly-scattered community, as it very often enables a school to be maintained where no school could be carried on without this help. It is not uninteresting to observe that, since the year 1859, the practice in England has been gradually approximating to the practice which has been adopted in Natal. This is strikingly evidenced in the so-called conscience-clause which has recently been submitted to the National Society in England by the Education Department of the Privy Council, and which is to the following effect: 'The said committee shall be bound to make such orders as shall provide for admitting to the benefits of the school the children of parents not in communion with the Church of England as by law established; but such orders shall be confined to the exemption of such children, if their parents desire it, from attendance at the public worship, and from instruction in the doctrine and formularies of the said Church, and shall not otherwise interfere with the religious teaching of the scholars as fixed by their parents, and shall not authorise any other religious instruction to be given in the school.' The object of this clause is to secure the religious instruction in denominational schools from noxious interference, and at the same time to provide for the secular instruction of the children of dissenting parents in such denominational schools, without violence to the rights of conscience, where such schools only are available. In the English practice, as

with us, managers are allowed and encouraged to make the daily reading of the Bible by every child that can read an absolute rule, so long as the text is not employed to enforce doctrine which is that of the denominational school but not also that of the parent. The principle of the arrangement is the utilisation of religious zeal in the cause of general education, in a way that precludes the possibility of public money being turned to objectionable account in proselytism."

As the next paragraph of the Report relates how he himself dealt with a difficulty into which the religious element entered, I extract it also.

"The proceeding alluded to in the preceding paragraph has unquestionably fulfilled its purpose, and has in the main worked well. During the six years and a half, only one case has occurred in which any difficulty has been experienced in the application of the principle, and in this case the difficulty proved very short-lived. In a public school which was presided over by a clergyman, and which was accommodated in a church, a prize awarded to a girl by the clergyman was sent back by a parent accompanied by the insinuation that an unfair award had been made. In consequence of this act, four girls belonging to the family were summarily dismissed from the school by the reverend president. An appeal was made to the Superintendent of Education by the aggrieved parent, on the ground that the school was a public school. The Superintendent of Education asked, as an act of grace to himself, that the children might be allowed to continue their attendance at the classes of the school under protest, until he could personally inquire into the matter and use his influence to adjust the disagreement. This request was summarily refused. In consequence of this refusal, amounting virtually to the denial of the conditions involved in Government aid, in-

spection, and supervision, the grant was temporarily suspended; and the Superintendent of Education called a meeting of the inhabitants interested in the maintenance of the school, to ascertain for himself how far the state of matters was satisfactory to them. At this meeting fifteen out of sixteen of the parents who used the school requested that the school might be moved from the church, and the public grant be renewed to the school under the usual conditions attached to the appropriation of public money. This course was immediately taken, and the school is now in full operation under the altered arrangements."

Great as is the length to which they run, I give the remaining paragraphs of the Report entire, in order that my husband may show for himself the good sense in the choice of means, in adopting principles to special circumstances which guided his proceedings, the tact with which he secured the co-operation of others, and the comprehensive, ever-expanding views he entertained of the aims and duties of his office :—

"15. The public schools, aided by grants of money, are all presumed to be under the general management of committees of the inhabitants of the place. The only requirements of the grant are that the school shall be open to Government inspection, that there shall be fair teaching of the subjects comprised in a general elementary education, that there shall be an attendance adequate to the amount of the grant, and that nothing shall be done in the arrangements and business of the school which can tend to exclude any well-behaved and unobjectionable child from the advantages of the school so long as public money is contributed towards its support. Every reasonable endeavour is made to induce communities to organise and maintain their own committees. When they fail to do

so, committees are often nominated by the Superintendent of Education to co-operate with him in the management of the school. In practice very few of these committees concern themselves actively with the management of the schools. Notwithstanding this, the arrangement is a good one, because there is the provision of an agency, which can be brought into operation in case of need; and because, when any difficulty arises in the working of the school, it enables the experience and tact of the Superintendent so to suggest a remedy as to make it virtually the action of the people themselves. When no committees can be formed, the business of the school is conducted by the teacher under the supervision and advice of the Government Superintendent. Of the 42 fixed schools in receipt of Government aid during the past year, 24 had managing committees, and of these committees 17 held meetings, or exercised some practical influence.

"16. There has been no difficulty throughout the six years and a half in getting the local committees of aided schools to co-operate with the Superintendent of Education. The committees have in every instance shown the utmost readiness, and even eagerness, to avail themselves of the advice and assistance of the Government officer.

"17. The exact amount of the grant to each school has been in the main determined by the general usefulness of the institution. That is to say, the number of pupils attending the school and the efficiency of the teacher have been elements in apportioning the grant; but, as a general rule, the scale of the grant, viewed in relation to the number of the pupils taught, has been more liberal in the case of the smaller schools than in the case of the larger ones. In every instance the grant recommended for the school is

submitted specifically on the estimates of each year, and approved by a vote of the Legislative Council. But, in addition to this, the actual payment of each grant is sanctioned by the Lieutenant-Governor every quarter, upon the immediate recommendation of the Superintendent of Education. The full amount of the grant voted by the Legislative Council is not appropriated to the school unless the school is reported by the Superintendent of Education as continuing to fulfil the conditions upon which the assessment has been made. The Superintendent of Education receives and records statements of the attendance and proceedings of the schools at the end of every quarter, and before the quarterly payments are made; and these returns are checked by the annual visits of the Superintendent. The amounts of the grants to the several schools are distributed with reference to the broad outlines of a general scale, but they are not definitely fixed by an inelastic and rigid rule. The entire conditions of the school and of the community are considered in the recommendation. A rigid and unvarying rule is sure to apply disadvantageously in some instances, where varying circumstances and a thinly-spread population have to be met and served. During the six years and a half just past the practice adopted has answered exceedingly well.

"18. The teachers engaged at the several schools have all been derived from the general run of the colonial community. Some of them are trained teachers, and possessed of very fair skill and experience in their art. Upon the whole there has been a marked and steady advance in the conduct and management of the schools from year to year. I can now speak of the teaching in the following schools, at least, with marked approval. (Here follow the names of as many as eighteen.) In many

of the other schools fair work is also accomplished. I can also add that there is now a staff of twenty itinerant teachers, male and female, engaged in the up-country districts, who are all of good character and fair proficiency. The improvement in the character of the teachers who have been selected and employed in this portion of the work has been very unmistakable.

"19. Mr. R. D. Kidd, who is a trained teacher of considerable aptitude and skill, and of unexceptionable character, has been fixed at Pinetown, under arrangements which enable me to avail myself of his powers to give occasional instruction in the art of teaching to young teachers on the coast and to candidates for employment. Mr. Kidd receives an additional grant for this service and for his general efficiency. I expect to reap increasing advantages from this arrangement.

"20. I believe there is only one way in which, in the circumstances of the colony, the several small schools can be raised to the highest attainable state of efficiency which it is so desirable to secure. A supply of young trained teachers of good character must be gradually brought from England, and kept ready on hand, as supernumeraries, to fill up vacancies at the public schools, as these occur. These teachers must be brought out on a fixed Government salary, and must be temporarily employed in the larger central schools, until they can be drafted off to the scattered schools of the colony. The salaried teacher will then be given to the school, instead of the money grant, and the teacher will appropriate the fees paid by the pupils in addition to his small fixed salary. I very much regret that it is not possible, in existing circumstances, to make any immediate progress in the introduction of these trained supernumeraries. But I hope to use the opportunity of my visit to

England to perfect the arrangements under which the plan may be ultimately carried out.

"21. The supply of school-books, and wall-maps, and other appliances from a central Government store, has yielded incalculable benefit. I believe, indeed, that this measure has done more to advance the character of the public schools than anything else that has been attempted. A mere glance at the number of books issued during the past year will sufficiently indicate the importance of this proceeding. Liberal grants of very excellent books are continually made to schools, to teachers, and to individual pupils, as recognitions of good conduct and application. But besides this, still larger numbers are supplied at cost price for the service of the schools, the amount of these sales being returned from the quarterly payments of grants to teachers, and paid into the public Treasury. Six and a half years ago, a few tattered copies of the lowest class-books were the sole appliances found in the schools. Now an unlimited abundance of the best books exists in every school, and almost every day small packets of these books are being scattered through the length and breadth of the colony in the mail-bags, in addition to the larger parcels that are in constant transmission by other means of transport. The distribution of school-books, and collection of the revenue derived from their sale, now forms a very onerous branch of the duties of the Superintendent of the Educational Department.

"22. During the past year packages of school-books and maps have been supplied on several occasions to schools beyond the frontier of the colony, and letters have been received in grateful acknowledgment of the service, enclosing the value of the supply.

"23. Provision has hitherto been made every year for

giving increase of grants under the contingency of advanced usefulness, and for starting new schools, until the next meeting of the Legislative Council has enabled the increase and the new grants to be specifically submitted in the estimates for the following year. This arrangement has worked very satisfactorily. It has constantly enabled schools to be started in the localities where there has been considerable need of them months before they could have been brought into operation in the absence of this provision. Clause 8 specifies how this portion of the educational estimates was expended in the year 1865.

"24. Grants in aid of the building of school premises are occasionally made. These grants answer a very excellent purpose. Comparatively small outlay of public money enables suitable provision for school-accommodation to be permanently made in situations where it would be quite impossible otherwise to secure this benefit. A recommendation is made for a grant of £50 in aid of building a schoolroom at Ladysmith during the next year. The inhabitants of the place have subscribed as much money as will suffice, with the addition of this grant, to erect a public school upon ground conveyed to the Superintendent of Education for the purpose. The school has for some time been held in the residence of the teacher, without any allowance being made for hire of the premises; and it has now been found that the services of an efficient teacher would be lost to the place unless some measure is taken to relieve her from the burthen.

"25. During some years it has been found a task of considerable difficulty to get fair schools maintained in the central townships of the up-country counties. This difficulty has at length been fairly overcome, and for the first time there are altogether satisfactory schools in Ladysmith,

Weenen, and Greytown, very nearly a hundred pupils being now in attendance at these three central district schools.

"26. The Government schools differ essentially in one particular from the aided public schools. The entire cost of the schools is provided for by the public estimates, and all the fees contributed by the schools are returned into the public Treasury as revenue. Only the principal masters, however, of these schools are salaried upon the Government establishment. The subordinate masters are paid by votes submitted annually, and passed as provisional grants in aid. The reasons for this arrangement are, in the first place, that it is essential to provide, by a permanent and fixed salary, for the principal master, in order that the services of a gentleman of special aptitude and attainment may be secured; and in the second place, that it is not deemed advisable to increase the Government establishment to the full extent of the cost of these central schools. This method of proceeding has worked advantageously.

"27. The Government schools are confined to the two principal towns. They are of two distinct kinds. The low schools provided to secure the possibility of elementary education at low charge to the children of the floating and miscellaneous population always existing in these towns. In these schools more than 300 children are instructed by the State at an annual cost of something less than £800 sterling. And the High Schools provided to insure a somewhat higher middle-class education at moderate cost than could be procured without their establishment. The High School at Maritzburg has been conducted during the past year at a somewhat higher cost to the State than is deemed altogether advisable, in consequence of a series of circumstances which it has been found impracticable altogether to

control. When all the fees have been collected, the public cost of the school will have been about £200 for the year; but there is still an arrear of £167 due for fees in this school. A High School of a similar class will be opened in the town of Durban in the month of April next. Mr. Russell, from the Church of Scotland Training College in Edinburgh, is now on his way out to assume the conduct of this school. For the present it is intended to confine the operations of this school to a single class of pupils who have already qualified themselves for entrance by a certain amount of attainment and proficiency.

"28. Arrangements are in active progress for the establishment of a Collegiate Institution at Maritzburg, which will to some extent supersede, and in another sense, supplement and complete, the operation of the High School. Two fine class-rooms are in process of erection within the city on an excellent site, and will now be ready for use within a couple of months. This school will be under the entire control and management of the council of trustees appointed by legal enactment for the purpose. It will, however, prove quite impracticable to commence the active operations of this school, under its proper management, until a further endowment, or, in default thereof, temporary aid is furnished. So soon as the public revenue can afford a temporary grant of £500 per annum, to be continued for a period of not less than five years, it will be possible immediately to organise and give vitality to the institution. The grant would be appropriated to paying the salary of a principal of high attainments, and to hiring temporarily premises adapted to the residence of one master and a certain number of pupils under his care. But the grant would have to be made to the trustees in aid of the support of the Collegiate Institution, because the

law of incorporation provides especially that the principal and masters of the Institution shall be under the direction and government of the council of trustees. In the meantime, and until this further assistance can be temporarily afforded, the council of trustees proposes to let the classrooms to the Government High School for the accommodation of its classes, and to appropriate the rent thence derived, in connection with such other early fruits of its endowment as can be realised, to the enlargement and completion of the buildings.

"29. I desire finally to state that I hope to use the occasion of my visit to England in various ways for the advantage of my department of the public service. There are sundry matters connected with the supply and training of teachers, the organisation and conduct of school business, and the selection of apparatus and books, that I very much desire the opportunity of investigating in England in person. I also wish to inquire into the bearing of certain points of the general question of public instruction which are gradually acquiring prominence in the views and practice of men at home. This feeling had grown so strong that I should have asked for leave to return to England within a few months, for the prosecution of these inquiries and for the benefit of my own special department, if circumstances, connected with other work, had not opened out the opportunity for me upon another base."

THE END

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