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Contributors

Haines, Hermann A. Royal College of Physicians of Edinburgh

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MEMORIAL OF THE LIFE AND WORK

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OF

CHARLES MOREHEAD, M.D., F.R.C.P., C.I.E.



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MEMORIAL OF THE LIFE AND WORK

OF

CHARLES MOREHEAD,

M.D., F.R.C.P., C.I.E.,

FIRST PRINCIPAL OF GRANT MEDICAL COLLEGE, BOMBAY.



EDITED BY

HERMANN A. HAINES.

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PREFACE.

A FRIENDSHIP of nearly forty years with the late Dr. Morehead, gives me the privilege of saying a few words by way of preface to this Memorial, especially as besides myself only two or three of the original Professors of Grant College Bombay are now living. It is a pleasing retrospect to review years of almost daily intercourse with Dr. Morehead, and to recall a period—very precious in our several careers—when we were his associates in the early days of Native Medical Education in Western India. Lapse of time has not dimmed our recollection of his calm sagacity, his devotion to duty, and his clear and far-seeing views. The interval has rather enhanced our appreciation of his great example, of his teachings and writings, and of his long and valuable labours in India. His memory is consequently cherished by us with feelings of deep veneration and attachment.

PREFACE.

To this tribute of affectionate regard I need only add, that his Daughter and representative, acting upon my suggestion, entrusted the preparation of this Memorial of her father's life and work in India to Mr. Hermann A. Haines of the India Office, who, by his talents and position, as well as from being a son of the late Dr. Robert Haines of Bombay (a distinguished contemporary of Dr. Morehead's at Grant College), appeared well qualified for the duties of Editor. The accompanying able sketch, the result of a close study of the materials placed at his disposal, may be taken as giving a faithful and impartial delineation of the mind and character of the first and most eminent Principal of Grant College, Bombay— Dr. Charles Morehead.

W. C. COLES, M.D.,

Surgeon-Major (Retired), Formerly Professor in Grant College.

E. I. U. S. Club, 14, St. James' Square, London, S.W. 1st October 1884.

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ERRATA.

Page 32, last line, for Mr. Peel read Dr. Peet.

- " 87, eleventh line from bottom, for 1869 read 1859.
- " 95, fifteenth line from top, for 1852 read 1854.
- " 101, thirteenth line from bottom, for Miss Morehead read Dr. Morehead's brother, Mr. Robert A. A. Morehead, of Sydney.



THE LIFE AND WORK

OF

CHARLES MOREHEAD, M.D.

CHAPTER I.

EARLY YEARS.

CHARLES MOREHEAD was born on the 8th of February 1807, in Edinburgh, being the second son of the Rev. Robert Morehead, D.D., who was, at that time, one of the ministers of St. Paul's Episcopal Chapel, and Dean of Edinburgh, and, for the last years of his life, Rector of the parish of Easington, in Yorkshire. The father is described in the Memorials of the Life and Writings of the Rev. Robert Morehead-published in 1875 by his son, who is the subject of this memoir-as a man of high and noble aims, and of great literary and poetic gifts. The following testimony, by another hand, of the father's worth is to be found in the preface : "Perhaps few persons in any sphere have left behind them a character more beautifully marked by everything that was amiable, liberal, and purely Christian. In this city (Edinburgh), where the excellence of the author's character and the extent of his acquirements were universally admitted

and honoured, he was regarded with a love and respect not surpassed by the homage paid to any of his contemporaries." No doubt, from a father's character of such description, Charles Morehead derived much of the nobility, earnestness, and ability which were conspicuous in his own life. His mother was Margaret, the daughter of the Rev. Charles Wilson, Professor of Church History in the University of St. Andrews, and second cousin and sister-in-law to the late Lord Jeffrey. She, too, was remarkable for energy and individuality of character, as well as for wit and humour, anecdotes of which are still preserved among the traditions of the family. In the Memorials of Dr. Robert Morehead, a description is given of the wife, the *light* that brightened his life's path: "a self-denying, loving nature, a wise and cultivated intelligence, a heart rejoicing in all that is great and good in man, and sorrowing with all that is weak and erring and suffering, a genial and impressive wit, and a constant sense of the beauties and the marvels of creation, interwoven with an abiding veneration of the Creator." In spite of the engrossing cares of her children, she was constantly engaged in schemes for the good of others, and, in her views on many subjects, she proved herself to be in advance of her own age. The accomplishment of drawing, which Dr. Morehead afterwards found so useful in describing hospital and sanitary arrangements and in other matters, he owed to the fact that his mother had insisted on his being taught the use of the pencil in an age when it was by no means the fashion to include drawing in a boy's education. Her early advocacy of drinking-fountains for the people, imitated in after years by Dr. Charles Morehead, took a practical shape in a fountain of a rough kind which she set up in the highroad near Easington Rectory, in Yorkshire, in the place

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of which there now stands a handsome one in stone, erected to her memory, as the inscription says, "by five sisters, grand-daughters of the Rev. Robert Morehead, D.D." At Craigcrook, her brother-in-law Lord Jeffrey's house, Dr. Charles Morehead frequently, as a young man, met Sydney Smith, Miss Edgeworth, Carlyle, Mrs. Carlyle, and other notable men and women of the literary world of that period, of all of whom he seems to have carried away clear and lasting recollections; his memory for faces and scenes being so great, that he was wont in later life to say that he had in his mind photographs of all his friends and acquaintances.

Separated, as were their spheres of action, by the whole breadth of India, the two brothers, William and Charles, maintained a lively interest in one another's schemes for the good of the natives of India.

Charles Morehead had four brothers and four sisters, and was, as has been said, the second son, the elder brother being William Ambrose Morehead, who entered the Madras Civil Service, and concluded a highly distinguished career, by being, for five years, a Member of Council at Madras, and, as senior member of the Council, he was twice called on to officiate as Governor of the Presidency.*

Dr. Morehead received his early education at the High School of Edinburgh, which he left for a course of study at Glasgow; and there the lectures from which he considered that he derived special advantage were those of Professor Jardine, on Moral Philosophy, in Glasgow University, at which he used to sit next to John Stirling, as

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^{*} In a letter from Madras, Dr. Maclean, now Professor of Clinical Medicine in the Army Medical School at Netley, wrote to Dr. Morehead, "Your brother is a most popular Governor. The people, black and white, would be glad to see him permanently in office."

a fellow-student. With reference to these lectures, it may be observed that in 1860, when Dr. Morehead was consulted regarding the medical curriculum and examinations of candidates for degrees at the London University, which was then under reconsideration, he strongly advised that a preliminary knowledge of logic and moral philosophy should be required of all students of medicine, on the ground that, from Professor Jardine's teaching, an influence was left behind in his own mind, which affected for good all its workings in after life. Leaving Glasgow, Dr. Morehead entered the medical classes in the Edinburgh University, where he made himself conspicuous, both winning honours in the science classes, and attracting, by his zealous devotion to the study of clinical medicine, the notice of Professor Alison, whose clerk he became at the end of his course.

After Dr. Morehead's death, a friend, Dr. W. Wood, of New York, writes of his "old college friend, 'Charlie' Morehead. It is nearly, if not quite, sixty years since I saw him, and yet I can recollect his jolly, pleasant ways, as if I had heard him speaking but yesterday."

Dr. Morehead also proceeded to Paris, in 1826, where he studied for more than a year under the famous physician Louis, and an intimate correspondence was afterwards maintained between master and pupil, till the death of the former. He was likewise, while in Paris, a favourite pupil of Laennec, the inventor of the stethoscope, an instrument for the use of which Dr. Morehead's remarkably acute sense of hearing made him peculiarly qualified.

The clique of Edinburgh students who were at that time in Paris is mentioned by Dr. Charles J. B. Williams*

* Memoir of Charles J. B. Williams, M.D., p. 34, 35.

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in the following terms: "In these drawing lessons I was joined by several of my former fellow-students at Edinburgh, and we often had pleasant companionship in visiting the Jardin des Plantes, Père la Chaise, St. Cloud, Versailles, and other objects of interest in or near Paris. They, and others afterwards, made up a pretty numerous party of advanced students, who attended the hospitals and classes together when the season began. It is pleasant to record their names, although very few survive to the present day: Robert Young, afterwards of Camberwell; Prestwood and Henry Lucas, of Brecon; Charles Morehead, afterwards Professor of Medicine in Grant College, Bombay."

This account of Dr. Morehead's early years may be concluded by the following sonnet, written, while he was at Paris, by his father, under the title of "A Prayer for William and Charles":—

> God of my fathers, from thy throne sublime, Whose eye has followed all my wanderings vain, And guided me—I trust, to peace again,— So watch my sons, in this their dangerous prime, Where'er before thee, in whatever clime, Him, whom the Indian shores afar detain,

And him, who sojourns on the banks of Seine; To Thee, that art in every Place and Time,

The same God, be they faithful and intent Simply to do Thy will, nor give their heart

To youth's seducing snares; but soon repent, If, for a season erring, nor depart

From their first love; but still Thy holy lore Reverence, their parents, and their native shore!

This sonnet is interesting, both as an indication of the nature of the influence under which Dr. Morehead was educated, and as giving, in the form of a prayer, what may be taken as a just description of his actual character. "Faithful and intent simply to do God's will," Dr. Morehead was in a remarkable degree.

Dr. Morehead finally graduated in medicine in the Edinburgh University in 1828, and it was in 1829, when he was twenty-two years old, that he entered the Bombay Medical Service; and, presently, after two years of the usual routine duty of a medical officer attached to a regiment, he received an appointment on the personal staff of the Governor of the Presidency, Sir Robert Grant,* who was then intensely engrossed in all schemes for favouring education and science, and especially medical science, in India; and of whom it was said+ that "he justly considered the state of medical knowledge, or, rather, ignorance and quackery, in India to have the first claim on his sympathies. He regarded medicine as the link which, in all ages, has been found to connect the less favoured nations of mankind with the more advanced ones in the easiest manner. The benefit is projected so boldly; and the difference of results between the scien-

* Sir Robert Grant (1785-1838), who belonged to an ancient Scotch family, was the second son of Charles Grant, an esteemed philanthropist, and was born in 1785. He studied in Cambridge, where he graduated in 1806. In 1807 he became a member of the English Bar, and, in 1826, entered Parliament as Member of the Inverness burghs. He was sworn a Privy Councillor in 1831, and was appointed Governor of Bombay in 1834. He died at Dapoorie, in Western India, July 9, 1838. While in India, he published several works. In the year after his death, his elder brother, "Lord Glenelg," published, in a volume entitled Sacred *Poems*, twelve of his poetical pieces. In the preface he explains that they had been written by his brother at different periods of his life, and that some had already appeared in periodicals. These hymns show that there was in the heart of their author a rich vein of spiritual life. "Oh worship the King," "Saviour, when in dust to Thee," and "When gathering clouds around I view," are well known, and are to be found in almost every collection of hymns .- Singers and Songs of the Church, p. 395, Miller; Longmans & Co., 1839.

[†] By the Bishop of Calcutta, in his address at the laying of the foundation stone of the Grant Medical College.

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tific treatment of diseases, and, the guesses of hereditary presumption, is so enormous, tangible, and directly affecting human life and happiness, that no prejudice of education or religious caste can long withstand the benefit." The two main reasons which made Sir Robert Grant peculiarly anxious to establish an Indian medical profession among the natives of India were, firstly, his natural grief at the unnecessary loss of life and suffering caused by the gross ignorance of native practitioners, and, secondly, his belief that, by establishing a system of medical education, the first, and, at present, the only possible step would be taken towards raising the general tone of education in Western India. This conviction was likewise held by Dr. Morehead, who wrote* about the same time that "of pursuits, to the followers of which learning was an essential constituent, and not a mere accomplishment, the medical profession was the only one of which an early footing in India could be anticipated."

In November 1835, the first move may be said to have been made in the required direction, by the establishment of the Bombay Medical and Physical Society, of which Dr. Morehead, whose work it to a great extent was, at once became the Secretary; and he continued to fulfil the duties of this post with the most conscientious thoroughness for twelve years, being at the same time a constant contributor to the *Transactions* of the Society.⁺

^{*} Preface to the first volume of Transactions of the Medical and Physical Society of Bombay.

[†] How valuable the work of the Medical and Physical Society has been, appears from a remark by Dr. Sylvester in a preface to one of the Reports : "I observe some of the chiefest medical men and writers of books in England have drawn the substance of their articles on sunstroke, leprosy, dysentery, from our publications, which should be sufficient reward for labours past to encourage us to continue." Some of the publications here referred to were undoubtedly from Dr. Morehead's pen.

The seven first reports were issued under his auspices, the first volume containing an interesting preface, in which he set out clearly the scope and aims of the Society. He pointed to the vast field for scientific research afforded by the Bombay Presidency, with its " opportunities of observing diseases in much variety of circumstances-in Europeans from infancy to middle age, the newly arrived, the long resident, the temperate, the intemperate, the habituated to one climate, and to many; all the variety of native population, with their different pursuits, habits, and modes of life, in regard to food, clothing, and habitation, &c." Much was to be hoped, he thought, from a wide and methodical observation of meteorological phenomena, and of their relation to health, from the investigation of the influence of physical agents on life, such as the diminished capacity of generating animal heat in a warm climate or season, from the careful observation of small-pox epidemics in India, and from a study of the effects of the treatment of tropical disease by mercury; for it may be mentioned that Dr. Morehead was strongly opposed to the excessive use of mercury, so popular in the profession at that time. Attention was also drawn to the question of the propriety and of the best mode of rearing European children in India. And, as if these objects were not sufficient for the society's work, Dr. Morehead further urged in this preface, that it had a vet nobler mission, which "ought to constitute the highest aim of its ambition, viz. the giving of the permanent benefits of medical science to the people of India, by introducing an efficient system of medical education."

The real difficulties in the way of creating a native Medical Profession were clearly seen by Dr. Morehead. "It is not pretended," he said, "that there is any diffi-

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culty in repeating to the native student the facts of anatomy, chemistry, materia medica, or the principles of the practice of medicine, as taught in the European schools. This is a task sufficiently simple, but, let its success be as unbounded as its most sanguine advocates could desire, still it may be contended that more is required before the gift of medical science to the people of this country be raised to its full value. These views, if just, do not tend to sanction delay, but to urge the necessity of study on the part of the medical teacher, and, further, to show that there is scope not merely for the operations of successful imitation, but also for the adaptations of original genius." He thought that there should be a special modification of the principles of practice to suit the circumstances of the native practitioners, and he preferred for Indian medical students, and for Indian medical science generally, the old-fashioned method of medical enquiry which began with the study of the effects of external agencies on health, instead of the more modern mode, which, relying chiefly on morbid anatomy, seeks to rise from a knowledge of the ultimate phenomena of disease to the more general knowledge of their initiatory laws. The warning, so fully realised in his work afterwards, is repeated, that "to be slavish imitators of the doctrines and systems of European schools is to show that we do not estimate our position here at its true value to science."

The remarks in this preface which are here alluded to, were, to some extent, a forecast of the method of instruction which Dr. Morehead actually established afterwards at the Grant Medical College, but, before the time came for the founding of that institution, he was to make himself still more qualified for the work by engaging in another educational movement in the Bombay Presidency, from which he undoubtedly gained great experience and knowledge of the average mental capacities of the natives, and of their character and modes of training.

In 1840 Dr. Morehead was appointed Secretary to the newly-created Board of Education. The first two Reports, issued while he was Secretary, show the work done by the Board, and their principles of action. Almost every educational institution in the Presidency seems to have been inspected and described, even to the details of its history; improvements of every sort were carried out or recommended; inefficient masters were remanded to normal schools for instruction; vernacular class-books, in which many schools had hitherto been starved, were supplied more abundantly, and more cheaply; and new translations into the native dialects were made where such were wanted. In all this, a sound education was the main object. But Dr. Morehead and his colleagues would not have the education given by Government thought lightly of. There was danger of a kind of demoralization arising from the very eagerness of Government to extend education, an eagerness which the Board found had been often taken advantage of. Districts had petitioned for schools without really requiring them, without being able or willing to make full use of them; and public money had thus been wasted in one direction, which might have been profitably employed in another. Tests were, therefore, wanted to distinguish the deserving from the undeserving, and these the Board tried to impose, by requiring that suitable school-houses should be built and kept in repair at the expense of the surrounding districts, and by exacting small fees from any student to whom this payment was no serious hardship. This, which was a very considerable change from old conditions, seems to have been successful, and to have afforded the best "means of testing whether the liberal intentions of Government were met by corresponding sincerity on the part of people who petitioned for schools."

Perhaps the most interesting feature of the policy of the Board of Education, while Dr. Morehead was Secretary, was their effort to obtain the co-operation of the local magnates and influential men in support of the various schools throughout the Presidency. It was an attempt, successfully made, to inaugurate a policy of local self-government in India, so far, at least, as regarded this one class of national institutions. And the arguments by which the Board recommended the constitution of local school committees were not unlike those now put forward by Lord Ripon and his adherents in favour of the municipal and district committees of their last Local Self-Government measure. It was hoped by this means to relieve the officers of Government from some of their cares and labours of supervision, which might be undertaken more effectually by the voluntary co-operation of the members of the new committees, and at the same time to awaken a more general interest in questions connected with education.*

The second Report of the Board, issued under Dr. Morehead's auspices, is dated the 31st March 1843; and on the day before, that is, the 30th of March 1843, the foundation stone was laid of an institution which was to give a most important addition to the highest department of education in Bombay, an institution which was closely connected with the remainder of Dr. Morehead's life, and which owed to him, in great measure, its birth and final success, and was named after the Governor of the Presidency, that is, Grant Medical College.

^{*} The views of the Board, and a summary of their work, may be seen in an extract from their second Report, which will be found as Appendix I., at the end of this Memoir.

CHAPTER II.

GRANT MEDICAL COLLEGE AND ITS FIRST PRINCIPAL.

EARLY in 1838, while he was Secretary to the Board of Education, Dr. Morehead received an offer from the Governor to accompany Sir Alexander Burnes on his second mission to Afghanistan. This is referred to in the following interesting extract from a letter written by Dr. Morehead on the occasion of the late Afghan war of 1878:—

"This is a miserable business, this Afghan complication. Of course, a slap on the face may not be quietly accepted; but, as to the wisdom of holding up your cheek to the smiter, there may be two opinions. How it carries me back to the former *fiasco*! I remember forming one of a small group of listeners around Alexander Burnes in the Government House at Malabar Point, when he was under orders to proceed to Cabul as Envoy to counteract the schemes of the Russian Envoy who was there. He said, alluding to his previous journey, which had made him a lion, 'I am going now with different objects; to work, not to produce effect,' or something to that purpose. Sir Robert Grant proposed to me to accompany him as medical officer. I declined, saying that my ambition did not lie in that direction, and that I did not possess the requisite qualifications. He asked me then to name someone else. I named Lord, who had lately arrived with introductions from Spring Rice, Chancellor of the Exchequer at the time. Lord went, and you know the end. He was appointed one of the Political Assistants—active and energetic. He was killed leading a cavalry charge in one of the border raids."

On this occasion, as always, Dr. Morehead, understanding his own powers, put aside, without regret, what to another might have been a strong temptation to enter a more promising and brilliant employment. Practice in his own profession, work in his own department, and zeal on behalf of medical education, were not so likely to lead to fame and early honours as the special duties of political missions. But mere honour and fame were never objects of Dr. Morehead's ambition; rather did he limit his desires to his own profession, wishing both to perfect himself as a physician-and his ideal of the perfect physician was peculiarly high-and to aid in raising the profession to which he belonged to the loftiest standard of purity and intelligence of which it was capable. For realising these ambitions there were, of course, more opportunities in Bombay, than he could have found if he had embarked on a political career. And his opportunity was not long in coming. Even when this offer was made him, the new scheme of medical education in Bombay was already taking shape, which developed afterwards into the Grant College, of which Dr. Morehead was the first Principal, having been one of the most active and influential in establishing it. It is not alleged that but for Dr. Morehead medical education could not or would not have been established in Western India, though, but for his co-operation, its introduction might have been

considerably delayed and its final success might have been very different.

Grant Medical College was not the first medical school founded in India. It was established more than ten years later than the one in Calcutta, which had already attained considerable success; and the Madras Medical School also preceded Grant College by some years. Even in Bombay itself, a Medical School-the earliest of its kind in India-had been instituted by the Government under Mr. Elphinstone, though, after six years of unsatisfactory existence, it had been abolished when Lord Clare was Governor. Though some men of more special knowledge and insight could see that this failure had been due to accidental defects of the particular institution, yet the fact that a medical school had been tried and found wanting had discouraged the whole educational movement in Bombay, and many men of position and experience boldly declared that the time had not yet come when an Indian medical profession in the Bombay Presidency could be hoped for, and that any attempt to introduce thorough medical education among the natives was for the time impracticable. It need hardly be said that Dr. Morehead was not among these pessimists. By his representations to Government, and especially by the Report of a Committee of the Bombay Medical and Physical Society, which he, as Secretary, drafted and forwarded to Government; he proved that the previous failure of the Bombay Medical School was not a proper cause for discouragement, as it had been due to inherent defects in that institution; defects which its Principal, Dr. McLennan,* had at the time pointed out to Govern-

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^{*} The character and career of Dr. McLennan are spoken of in an address by Dr. Morehead, at Grant Medical College in 1857, announcing the endowment of a new scholarship and medal, as

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ment, but Government had declined to remedy; he referred to successes at Calcutta and Madras, to show that there was a demand for native practitioners trained on European principles. Moreover, the indigenous medical systems of India were such a crying abuse that another experiment, even more precarious, would be justifiable. For the native practice of medicine was, indeed, a glaring blemish in the midst of a government professing enlightenment. To Dr. Morehead "the demoralizing effects of the irrational, superstitious, and, too often, criminal empiricism, which so often prevailed," demanded immediate treatment; and, without doubt, if the reports

the results of a public subscription, to preserve the memory of Dr. McLennan in Bombay. "There is," he said, "a natural propriety in desiring to preserve, in connection with a Medical College, the memory of a physician of rare endowment and sagacity, and there is a moral propriety in desiring to keep ever before the minds of our Indian graduates, the bright example of one in whom the moral and intellectual qualities which dignify the profession of medicine, were blended in admirable harmony; in whom firmness was tempered by tenderness, patience, and charity; in whom quick perception was regulated by sound and cautious judgment; and who in all the relations of life was guided by high principles of honour and integrity. But there is a special propriety in associating the name of McLennan with Grant Medical College. As Member of the Board of Education, he strengthened the hands of the Principal by support, steady, generous, and confiding. As Government Examiner, he fixed the standard of diploma with judgment and equity, and threw around the crowning act of the success of the College the halo of his own great professional reputation." On Dr. McLennan's retirement in 1855, after thirty-four years' service, the Governor in Council recorded his "high sense of the long and meritorious services of this eminently able and zealous medical officer, who has throughout his career been honourably distinguished by devoted and successful endeavours to promote the public interests in every position he has occupied "; adverting with "peculiar satisfaction," "specially to the unvaried zeal and ability by which his labours in the cause of native medical education have been characterized." On Dr. McLennan's death in 1874, at the age of seventy-three, a graceful notice in memory of him was written for private circulation among his friends, by Dr. Morehead.

of the time were to be believed, there was something ludicrous, if it had not been terrible, in the indigenous systems. Surgery, it seems, was an art of which the native practitioners were wholly ignorant, nor did they attempt any except the most elementary operations; and no wonder, considering that their traditional notions of anatomy were not based on any real knowledge, but on some wholly untrue theories as to the proportions and numbers of the parts of the human body. Their medical practice was almost as unscientific. Some were mineral doctors, using mineral remedies only; others patronized nothing but vegetables for effecting their cures. One practitioner, who had the largest custom in one of the largest towns of Western India, was reported to have been in the habit of prescribing rubies and pearls ground to powder to strengthen the heart; and all were wont to supplement their prescriptions by charms, amulets, and incantations; and, when their drugs produced no cure, or, rather, aggravated the patient's disorder, they were seldom at a loss to attribute their failure to opposing influences of supernatural agents. Besides, the customary education of these native practitioners was by no means such as could raise the profession, if it can be so called, from these depths of ignorance and superstition. The education of the most learned Brahmin Weid or Mussulman Hakeem consisted in observing the practice of some friend or relation (usually of his own father, for the profession was, to a great extent, hereditary), and in perusing portions of the Shastras, and of some other medical books of little value, drawn from Arabic sources; but even these sources of information were not always available to would-be practitioners. Some had never found the opportunity of apprenticing themselves to older doctors, others were without the

books referred to, or were unable to read them when acquired. Still the most utter absence of education was often insufficient to prevent these men from setting up as independent practitioners, or the sick from resorting to them. The margin of ignorance could be, and always was, well filled in with superstitious practices and impostures. There were, indeed, some real remedies, chiefly consisting in herbs and simples, which were known to the best-trained native doctors; but these were few and, with hardly an exception, already included in, though forming but a small part of, the materia medica of our European schools.

Under these circumstances, was it wonderful that Dr. Morehead, who had always a high ideal of his own profession, was most anxious to begin to introduce a change? The failure of the earlier medical school in Bombay was not to him, or to the Committee of the Bombay Medical and Physical Society appointed to report to Government on this subject, an argument against offering a scientific medical education to the natives of Western India, but only a proof that it should be offered in fuller measure than before. There had been five chief defects in the earlier college which would have to be avoided in any new institution. Sir Robert Grant, following the lines of the Medical and Physical Society's Report, thus states them in his able minute.* Firstly, instruction had been given in the vernaculars of Hindustanee and Mahratta, though in the former there were only a few meagre translations of European medical tracts, and in the latter absolutely none; secondly, the previous training of the students had been insufficient, most of them on entering the school showing only a moderate knowledge of their own ver-

* Dated, March 1838.

naculars, and a slight acquaintance with arithmetic; thirdly, in the college course the study of practical anatomy had been altogether omitted; fourthly, the controlling body, consisting of a fluctuating Medical Board, not appointed with special reference to their qualifications for this duty, were ill-adapted for the management of the institution; and, lastly, as there had been no hospital attached to the school, practical training of the students was impossible, and how, then, could it be expected that efficient practitioners would be the outcome of the college course? With these objections to the old school before him, Sir Robert Grant was "of opinion that a seminary should be established for the education of natives, with a view to qualify them for the practice of medicine and surgery; that the pupils should, however, possess a considerable amount of preparatory education; that the several branches of medical knowledge should be thoroughly taught in the seminary, the medium of instruction being the English language; that the practical study of anatomy should be particularly, though with judgment and caution, enforced; and that a hospital for natives, and also a vaccination department, should, in some way or other, be connected with the establishment." Again, with respect to the final object of the school, this minute quotes, with approval, Dr. Morehead's view that it should be "the education of natives, to fit them for the useful and safe practice of surgery and medicine, and not the training of the hospital servants of the State." It had been, in fact, a half-hearted desire to create an independent native medical profession, and, at the same time, to train a class of hospital apprentices and subordinate attendants in Government dispensaries, which had helped to shipwreck the former school, and, to shun this rock in the future, the sole aim was to be the nobler one of

bringing into existence a profession of native doctors which should, some day, rival the professional bodies of Europe.*

This elaborate minute of the Governor's, which became afterwards a sort of charter of the Grant Medical College, was one of his last official acts before his early death, which took place on the 9th of July 1838. On the 28th of July, a meeting was held to adopt measures for preserving his memory in Bombay, at which it was resolved that there was a peculiar propriety in commemorating Sir Robert Grant in connection with the cause of education of the natives, of which he was the enlightened friend, the eloquent advocate, and the liberal patron and supporter; and, further, that on condition that the Medical College, so ably planned and so zealously advocated by Sir Robert Grant, be established and bear his name, the fund be applied, under the direction of a committee to be nominated by the meeting, to the erection of a suitable building for that seminary, or the foundation of scholarships, to be conferred, after public competition, on its most deserving pupils. The subscriptions amounted to Rs. 44,800, to which the Court of Directors agreed to add an equal sum for the construction of suitable and handsome college buildings; also, about the same time, a new Native General Hospital, on a large scale, was erected in Bombay, thanks to the liberality of that most patriotic citizen, Sir Jamsetjee Jejeebhoy, who gave Rs. 1,00,000 for that purpose, on condition that the East India Company should expend an equal sum, which they consented to do. It thus happened that the Medical College and New Hospital were constructed about the same time, and

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^{*} The above remarks are based on records at the India Office, consulted by permission.
in close connection with each other, so that, at the opening of the College, the instructors and students found ready at hand an abundant field of observation and practical training. With a view to making the arrangements of the College and Hospital as suitable as possible, Dr. Morehead was constantly on the spot supervising the work of construction, and was, throughout, a most useful assistant to the architect, until, finally, he received both buildings under his own charge, as Superintendent of the College and of the Hospital. To the European General Hospital, which was a separate institution, Dr. Morehead had been appointed Assistant-Surgeon in 1838.

The foundation stone of Grant Medical College was laid on the 30th of March 1843, on which occasion the Bishop of Calcutta delivered an address in eulogy of the late Governor, and, speaking of the College, said that he was persuaded that if it were possible for their late beloved friend to know what they were engaged in, he would infinitely prefer the practical and humane memorial to his name of such an institution, to the barren renown of a monumental pile.

It was not till October 1845 that the new buildings passed from the charge of the architect to that of the Superintendent, Dr. Morehead. But after this, there was no further delay; the entrance examination of the students was held on the 20th of the same month, and the first lectures were delivered on the 1st of November 1845.

So much it has been necessary to say with respect to the history of medical education in Bombay previous to the opening of Grant Medical College, in order to bring out in clearer outline the chief work of Dr. Morehead's life, as Principal of Grant Medical College. It was not only that the system of education, which shall presently be described, was sound, well adapted to its purpose, and to a great extent original, but that the one aim to which this system of education was but a means, namely, the creating of a native medical profession, with the same high qualities which distinguish the medical profession in England, was never lost sight of. It was not the immediate success of his school which Dr. Morehead was most anxious to secure, but the advancement of medical science in India, and the substitution of a scientific medical practice in the place of the evil empiricism of the native practitioners. It was, he considered, only in proportion as these objects were effected that the school itself could be reckoned successful.

Now, the Grant College once opened, every detail of its arrangements, and its whole method of instruction, were planned and mainly executed by Dr. Morehead; so that, by describing certain features of its system of education, may be best shown his views regarding medical education, as well as his powers of organization. The descriptions shall be, as far as possible, in his own words, taken from the early Reports of the College while it was under his charge.

As Secretary of the Medical and Physical Society, in a passage already quoted, Dr. Morehead had stated his opinion that to be slavish imitators of the doctrines and systems of European schools, would be to show that men did not estimate their position in India at its true value to science; and now that he was himself in a position to determine the course of instruction, he proved himself to be no "slavish imitator" of foreign methods. He took as his model neither the European schools of his early experience, nor the Bengal College, which he paid a special visit to Calcutta to study before Grant College was opened; but he wished rather to set an example which these other schools might in some respects follow to their own advantage.* Fortunately, his connection with the Board of Education had given him a just knowledge of the standard of education in Indian schools, and a true appreciation of the character and intellectual capabilities of the natives; and it was by the light of the knowledge thus attained, and by a regard to the causes of the failure of the earlier Bombay Medical College, rather than in a spirit of copying, that he determined the system of instruction which made Grant College a success.

The chief feature of the Grant College education, in virtue of which it was, from the outset, far in advance of any other medical school of the time, was the careful imparting to the students of practical instruction at the bedside of the sick. And on this point Dr. Morehead thus writes in one of his early Reports: "And now I would observe that success cannot be said to attend the efforts made by the Indian Government to establish medical education, unless the graduates, on leaving the schools, are qualified for the safe and successful practice of medicine and surgery. If they are so, they will, in a reasonable time, acquire the confidence of the community, and be preferred to irregular and unqualified practitioners. This is the true test of instruction followed in our Indian medical schools. . . . It cannot be too frequently inculcated, more particularly on the nonprofessional public, that the mind may be stored with

^{*} That Dr. Morehead himself hoped such might be the result is shown from a statement in one of his Reports, that "he had placed on record the details of a most important department of medical instruction, with the hope that it might be of use to the teachers in the schools of Great Britain, and other countries, in many of which clinical instruction is undoubtedly defective."

facts of chemistry and anatomy, physiology and materia medica, and yet be a perfect blank as regards that kind of knowledge which fits for the safe practice of the art of medicine. This fitness can only be acquired by actual, patient, and continuous observation of disease, and of the action of remedies at the bedside of the sick, and by applying to these, in their proper place and order, the necessary facts previously acquired of the elementary branches of medical science which have just been named. It is to this that the term clinical instruction is applied. Upon the manner in which it is conducted, the usefulness and efficiency of a medical school mainly depend.

"It has already been observed that medical schools in Europe are frequently defective in this important part of education; yet there are very many excellent practitioners of medicine in these countries. The truth is that they acquire their practical knowledge, not by the clinical training of teachers, but by self clinical education, either when students, or after they have left the schools, and been pronounced qualified to practice medicine.

"Though it be true, then, that the profession of medicine can never, as a whole, occupy its proper position in a country unless the system of education and test examination be sound in principle and honestly conducted, still, it is equally true that, however perfect the system of collegiate discipline may be, the profession can never reach its most advanced state unless there be an after course of persevering and patient education on the part of its followers.

"The spirit that leads to this may, no doubt, to some extent be excited and encouraged by the example and precepts of those who are engaged in collegiate instruction, and by the institution of societies for self-improvement; but these means will not go far towards forming a body of matured, conscientious, and scientific medical practitioners, unless they are brought to bear on minds humble, industrious, and impressed with a sense of responsibility."

Ample means were provided for clinical instruction of the few students at this time, by the Jamsetjee Jejeebhoy Hospital, already mentioned, which was adapted to accommodate 240 males and 60 females, and where the numbers annually treated were 3,700 in-patients and 5,400 dispensary out-patients. Two wards were set apart as clinical medical and clinical surgical wards, for which the professors of medicine and surgery respectively daily selected, from the patients admitted into the hospital, those whose cases were most appropriate for the instruction of the students. These wards were daily visited by the professor and students, and the instruction lasted for not less than an hour. It must, however, be remembered that systematic instruction at the bedside was much more feasible at the Jamsetjee Jejeebhoy Hospital than it would be in a London Hospital, for the reason that the instruction upon the case was given in English, which the patients, with hardly an exception, did not understand.*

His system is thus described in a Report : "By means

^{*} This advantage was fully appreciated and constantly referred to by Dr. Morehead; while he considered that the difficulty in England of medical instruction in the hearing of the patients was to be got over by a large use of technical terms not generally understood. In a letter to a friend, in 1873, he writes: "I see that much of medical novelty consists in new words. I do not object to this, because I observe that it must be specially useful in clinical teaching, as admitting of much being said before the patient that would hardly be admissible if expressed in language intelligible to the patient. Laennec's bedside remarks were in Latin; with Indian patients—natives—English does very well; but with English patients, if you do not use Latin, a large infusion of technical terms is necessary."

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of conversation, explanation, interrogation, the attention of the students has been kept more fixed and interested, and their powers of observation and reflection more carefully exercised. These objects, most important to keep in view in the education of all youth, are more especially necessary in regard to those who have not had the advantage of that early mental discipline and training which is the privilege of the young of the educated classes of other countries."

And, to help the students to carry out a plan of casetaking and reporting, which was required of them, Dr. Morehead drew up, for their use, a memorandum of hints in which, as he says, "he endeavoured, on the one hand, to guard against superficial and careless observation, and, on the other, to avoid a system which aims at minuteness. and variety of detail beyond the capacity of many students, and not compatible with the circumstances of ordinary medical practice; and which, moreover, I cannot help thinking, tends to withdraw the attention of ordinary minds from the prominent points of a case and to fix it on subsidiary and, as regards treatment, unimportant detail. I would not, however, wish to be supposed, from these observations, to undervalue the patient and minute investigation of disease. I merely desire to express my belief that the system in question is not the best suited for the general purposes of useful clinical instruction, or the capacity of the great body of medical students and medical practitioners."

And, with reference to the clinical instruction at Grant College, Dr. Morehead was most careful to impart to the students a gentle and sympathetic manner in dealing with patients. "I have always felt it," he says, "to be part of the duty of a clinical teacher to take care that the manner of those engaged with the sick, and all the arrangements relative to their treatment, should be characterised by a spirit of humanity, by a strict regard for their feelings, and a reasonable regard for their prejudices.

"The teacher must, therefore, be watchful of his own manner and bearing towards the sick. It has been my practice to require the students to examine and interrogate the patients before me, not only with the view of instructing them in the right method of observing, but also with that of correcting defects in their general manner and bearing towards the sick.

"This observance, trifling though to some it may seem, is not an unimportant part of clinical instruction, for its tendency is practically to inculcate the importance of a much neglected part of medical practice—I mean the treatment and management of the mind of the patient. Inattention to this duty has done much to lessen the efficiency of the regular practitioner of medicine, and attention to it may explain, to a certain extent, the success that may attend the arts of the empiric."

Dr. Morehead's own manner towards his patients was most gentle, courteous, and humane, and he was most particular that the students of Grant College should not by their bearing dishonour the reputation of the College. Once, when it came to his knowledge that a clinical clerk had positively ill-treated a patient in the hospital, he forbad his ever having again the responsibilities of clinical clerk or attendant in the hospital, and was hardly dissuaded from altogether dismissing the offender from the College.

Beside these qualities of the heart, Dr. Morehead was endowed by nature with extreme delicacy of touch, which became especially useful to him when he was required to handle the sick. And in his teaching, as in practice, he was wont to lay great stress on gentle and careful nursing. True to his Scottish temperament, he also displayed in his own practice, and required, with inflexible sternness, of his pupils, and, it may be added, of his colleagues and subordinates, strict regularity. There is a story related by Dr. Giraud, the first Professor of Chemistry and Materia Medica, who was also afterwards Principal of the College, that, having one day, owing to urgent business, been a few minutes late for lecture, he received a letter from Dr. Morehead, saying that no private business, however urgent, should interfere with lectures, and Dr. Giraud added that from that time he never missed one. "The regularity of Professors here," he said, "has been traditional."

Such regularity and discipline Dr. Morehead could not have exacted of his colleagues, had he not conformed to yet stricter rules himself. One of his successors at a later time described him as an enthusiast; and so he was, if enthusiasm means a man's giving up his whole energies to the cause he has in hand. Between the College and Hospital almost all his day was spent; nor at night was he ever altogether unexpected in the Hospital, where he often came, at any hour of the night, when he thought that any patient was entering a critical period of his disease, or because he wished to see whether the Hospital attendants were punctual in dispensing the medicines which it was necessary for the patients to receive at stated times. By thus himself seeing, however great the inconvenience, that every rule was carried out, and every arrangement satisfactory, he infused a spirit of energy and zeal into the whole body of students, especially as his colleagues, of whom the first were Dr. Peet and Dr. Giraud, cordially co-operated in all his efforts. Dr. McLennan, Member of the Board of Education, in re-

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porting to Government on the question of adding two new Professors of Midwifery and Jurisprudence to the College staff, wrote: "No one who has had the opportunity, which I have enjoyed, of seeing the great weight of duty which presses on all these officers, and who has witnessed, as I have done, the unwearied industry and attention with which their most important avocations are performed, can come to any other conclusion than that no amount of assiduity or diligence can enable them to compass more than they now perform."

The clinical instruction at Grant College lasted for not less than two years for each student; and, undoubtedly, the praise of originating a systematic and thorough course of practical instruction and examination at the bedside of the sick belongs to Dr. Morehead, and it was owing to this cause that the graduates of the College were from the very first so well qualified to practise their profession, and procured for the Grant College a sound reputation.

In April 1851, the first batch of graduates, having passed the examination satisfactorily, received diplomas; and it must have been gratifying to Dr. Morehead on this occasion to receive the congratulations of the Hon. Sir Erskine Perry, Member of Council, who presided on this occasion. "For myself," he said, "individually, I cannot describe the interest with which I have watched the progress of this experiment during many years past. nor the admiration which I have felt at the exertions displayed by the gentlemen employed in conducting it. . . . We have heard from the Principal who the distinguished statesman was who called this institution into life; and there is nothing so insignificant a person as myself can say that will add to the reputation of Sir Robert Grant. His fine intellect, comprehensive mind, and wide philanthropy are well known to the community;

but it may be observed, that, if an inertness of temperament was sometimes ascribed to him, it never had a place in any of his labours connected with this College. . . But the name of another individual it is my duty to bring forward, without whose persevering exertions and steady enthusiasm, concealed under the calmest demeanour, the statesman-like views of Sir Robert Grant might never have been realised. Of the Principal of this College, of the zealous, thoughtful, benevolent, earnest Dr. Morehead, it is difficult to speak in his presence as I could desire, and as his merits dictate. His own modest and retiring nature would desire that his name should pass unnoticed, and I feel satisfied that a sufficiently rich reward he finds, for all the painful hours, the laborious years, he has spent in connection with this institution, in the innate satisfaction he must feel in witnessing the complete success which has crowned his exertions. But society has a duty to perform in signalling with its approbation the man who has rendered it meritorious service, and this duty is performed all the more cheerfully when such service is perceived to have been bestowed, as in the present instance, wholly without ostentation, without the slightest reference to selfish emoluments, or mere popular applause. Dr. Morehead has been most ably seconded by the colleagues whom Government has associated with him in these duties. But I am confident that in the language which I have been employing, I shall be considered, both by these colleagues and by all who are acquainted with the workings of this College from its commencement, rather to understate the praise which is due from his persevering, judicious, and enthusiastic labours. I ought not, however, to omit, what I am satisfied from my observation must be the case, that, in his relation to these young

men whom I see before me, his spirit of justice, mild demeanour, and parental attention to their interests have obtained for him a permanent position in their grateful bosoms, which, I trust, no lapse of time or change of situation will obliterate."

The remarks just quoted, with which the extract from Sir Erskine Perry's speech concludes, point to another marked characteristic of the Grant College in its early years, namely, the students' affectionate regard for the professors, which was due to their knowledge that the professors were ever ready and anxious to help them. Their regard for Dr. Morehead was especially strong, as was proved by the way in which his memory was revered many a year after he had left India, and by the frank and grateful tone in which several of his old pupils corresponded with him after his return to England. Naturally reserved as he was, Dr. Morehead had touch, as it were, of his pupils. Only provided that they were trying to use their opportunities at Grant College well, he was willing to put himself to any inconvenience and trouble in behalf of their interests; and because they knew by his words and acts that this was so, they confided in him willingly. If, on the other hand, there had been want of effort on the students' part, Dr. Morehead was as careful to show his displeasure; while, if any principle of the College rules had been violated, little allowance was made for the offender's weakness. The College discipline was, undoubtedly, severe, but it was not resented, because, in whatever concerned their real interests, the students appreciated the Principal's patience, kindness, courtesy, and generosity. There was in him, too, a calm and sustained enthusiasm for his work and his profession, by which he succeeded in inspiring the early students with somewhat of the same spirit, all the more remarkable because *esprit de corps* is not a feeling which is commonly found in Indian schools or similar institutions.

This esprit de corps which existed among the students, Dr. Morehead was anxious should be maintained among the graduates; and he hoped that it might develop into an esprit de corps of the new medical profession in India. It was necessary, then, that there should be some more visible bond of union between the members of the profession; and, accordingly, as soon as ever some half-dozen graduates had received their diplomas, he inaugurated a Medical Society, the account of which he thus gives in his Report for 1851-2 :-- "He takes a very narrow and erroneous view of the purposes of education who would limit them to the communication of a certain circle of knowledge. We here cannot thus regard the subject; we cannot feel that our duties and responsibilities towards you have been accomplished by merely teaching you facts of chemistry, anatomy, physiology, pathology, materia medica; we have, to the best of our ability, to discipline your mind to attentive observation, reflection, recollection, reasoning; and we do so, not only that you may be the better able to acquire, arrange, and trace the relations of the facts of these sciences, whilst you are students here, but because we know that, after you have left these halls, and become engaged in the busy scenes of active life, each act of your professional career to be useful must involve attentive observation, recollection, and reasoning.

"This discipline of mind, then, is of paramount importance to you all; it cannot be urged too strongly, too often upon your attention. It is true that while you are students here, the opportunities of impressing these principles upon you are of frequent occurrence, but I cannot conceal from myself that when you go forth into active life, and associate with those who have not enjoyed advantages similar to yourselves, that the temptation will be great to lapse into idleness; and this is an additional reason why we are desirous that you should leave the College not only well grounded in medical science and art, but also well armed with good and steady habits and firm resolves; nor am I without hope that, with the view of counteracting these adverse influences to which you may be exposed, we shall be able to devise some means of correspondence and intercourse, by which your connection with your teachers may be in some degree continued, and your minds maintained in active and attentive interests in these our noble and common pursuits."

"The importance of contriving means of encouraging in the young medical men of India those habits of continued systematic study and accurate observation, without which there can be no successful cultivation of medical science or useful practice of medical art, was felt by my colleagues equally as by myself. We knew that in European countries the institution of societies had done much towards developing and maintaining a spirit of scientific co-operation and of friendly professional intercourse; and we came to the conclusion that the same means, rightly used, might be made in this country to conduce to the same useful ends.

"Under these views the Grant College Medical Society has been established. It, in the first instance, has been restricted to the professors and graduates of the Indian colleges; it has been joined by all the professors and graduates of this College, as well as by Dr. Mouat, the able and indefatigable Secretary of the Bengal Council of Education. Mr. Peel* was elected President; Dr. Coles*

* Professors of Grant College.

and Mr. Bhao Dajee,* Vice-Presidents, and Mr. S. Carvalho,* Secretary.

"After these preliminary arrangements had been effected, the Society was formally opened in the Library of the College in the first week of January last; on this occasion the President delivered a most instructive and impressive address, which has been printed for the use of the members of the Society. Monthly evening meetings take place in the College, when a communication on some medical subject is read and calmly discussed; cases and preparations are then brought forward, and the microscope, when required, is used to assist in their explanations.

"If this Society be conducted in accordance with the sound and excellent principles inculcated by its President, and with the spirit which has characterised its early proceedings, there can be no doubt of its success, both as a means of self-improvement of its members and of advancing medical science and practice. But if this spirit pass away, and languor and indifference take possession of us, then the bright visions of the distinguished founder of the College will never be realised ; each succeeding year, it is true, may add to the number of our Indian graduates, but unless there be that aftercourse of persevering study and self-improvement which the operations of this Society are intended to foster and encourage, then these graduates-I state it as a firm conviction of my mind-these graduates will never become enlightened cultivators and practitioners of medicine."

Thus founded, the Grant College Medical Society has been a great success. Its co-operation was very soon solicited by the Medical Board in their efforts to intro-

* Graduates of Grant College.

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duce the practice of vaccination into Bombay, which was sorely needed considering the great mortality in the city from small-pox, reckoned at more than 4,000 in the years 1848 and 1852.* The papers read before the Society were in many cases of very considerable interest and value, some being afterwards accepted in the Transactions of the Medical and Physical Society of Bombay. It is needless to say that Dr. Morehead always continued to give every possible encouragement and aid to this Society. Towards the end of his Indian career he presented a large and valuable collection of books to the Society; and afterwards, when he was in England, he more than once brought it before the notice of the profession by reviewing at length its Transactions in the *Edinburgh Medical Journal*.

The passages already quoted indicate the views regarding the medical profession which Dr. Morehead desired to instil into the graduates of Grant College. But still it may be well to give a few extracts from his address, at the presentation of diplomas to the first batch of graduates, which present most clearly his own high views of his profession, and the spirit with which he tried to enforce them on his pupils :

"You are the first approved and accredited agents in a great work of national amelioration. You are to go forth

^{* &}quot;In 1854, with the view of co-operating with the Medical Board in extending vaccination in the island of Bombay, they (the graduates) practised it gratuitously in sixteen new stations, in addition to those of Government; and in order to familiarize the natives with the advantages of the discovery of Jenner, 1,500 copies in English, and 10,000 in Marathi and Guzerathi, of a memorandum drawn up by Dr. Morehead (with whom originated the idea), were printed and distributed; a small sum having been raised among them to defray the expenses."—Extract from the annual Address, by the President, to the Grant College Medical Society, delivered 13th January 1880.

armed with great powers of conferring inestimable benefits on others, not only in mitigating their physical suffering and soothing their mental anxieties, but also in enlightening and elevating their minds. Should you fail in this great mission, should the expectations of the great and good man whose generous advocacy of the interests of the people of this country has thrown open to you the portals of science, and been the means of placing you in the proud position which you are about to fill; should these expectations be doomed to disappointment, where will the blame lay? I must not conceal from you that it will be with yourselves.

"You well know that all human pursuits whose aims are good and useful, rise or fall in their character, according to the intellectual and moral endowments of those by whom they are cultivated. Of no pursuit is this more true than of the profession of medicine. When studied and practised by scientific and conscientious men, it is indeed a noble pursuit. Reflect calmly on its aims, consider its acts, and you will find it impossible to view it in any other light than this. . . .

"I have been led to make allusion to this, the true point of view from which the profession of medicine should be regarded, rather with the object of suggesting reflections to the mind of those who do not care to think of these things, who do not clearly understand why it is that the art of medicine has been from time to time a favourite theme with the satirist, who fail to perceive that the profession of medicine is brought into relation with human nature in its hours of physical suffering and mental weakness, and that, while this relationship is an arena suitable for the exercise of our best faculties and affections, it is also one most favourable for the dishonest practices of the ignorant pretender. It would be well

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were these facts more generally and more clearly borne in mind; it would tend to a juster appreciation of an honourable and useful profession, and serve to silence the flippant comments of uneducated and unthinking men.

"There is still a subject to which I would invite your attention, and on which I would venture to offer to you a few words of caution. You must carefully guard yourself against feeling disappointment if you do not, so soon as you wish, or perhaps so soon as you deserve, attain to that degree of professional success which the sanguine expectations of youth, or the partial judgment of friends may have led you to anticipate. . . . Never forget that the life of a medical man, if rightly spent, is one of constant study and observation and progressive improvement. Each year as it passes finds him wiser and more capable of performing the important duties of his calling. And this truth, which, rest assured, will in the course of years become a conviction of your own minds, is not unknown to others. Fix these principles in your minds; never rest satisfied with your acquirements; always look beyond to some point of knowledge to which you may endeavour to ascend; and, under the guidance of rules of action such . as these, with patience, perseverance, just humility, and integrity, you may be sure that the time will come when your success will equal all just and reasonable expectations."

The method of medical science which Dr. Morehead was constantly enforcing on his hearers, was the *inductive* method; as for the abstract speculations of different medical schools, whether Hindoo, Greek, Arabic, or Modern European,—"Let us," he said, "regard them merely as part of the history of the literature of medicine, and of the history of the human mind; and while we do

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credit to the genius and the industry of the great men of former ages, let us not fail to view their imaginative speculations, but as the wanderings of great minds in directions in which light was not to be found, and as beacons set up to warn us from giving way to the temptation of indulging in similar delusive dreams."

Again, in dealing with the faulty systems of medicine of India and of other countries, he counselled his students, in accordance with the inductive method, not wholly to set them aside, but to take from each and from all, the facts of science which they severally contained, and appropriate them to the purpose of the art as practised by themselves. "But," he says, "we must be certain that the facts are really facts, that they rest upon the testimony of competent, careful, and truthful observers." And again, he says, "Do not regard, in a spirit of proud depreciation, the pretensions of Homeopathy, Hydropathy, and Mesmerism. Examine them by the rigid rules of the inductive philosophy. Take and apply to the purposes of your art what you find in them of well authenticated fact, but discard the speculation with which the facts are, in general, so abundantly interwoven."

In 1852, or seven years after the completion of Grant College, an important addition to the Jamsetjee Jejeebhoy Hospital was opened in the shape of a lying-in hospital, the want of which had been felt as a most serious defect in the hospital as originally constructed. The Report of the committee of that institution thus refers to Dr. Morehead's connection with its establishment:

"But while the committee testify to the generosity of Sir Jamsetjee Jejeebhoy, who placed at their disposal the means of erecting the hospital, and to the skill, taste, and labours of the officers of Engineers who planned and executed the work, they must not omit to record at this, the close of their connection with the Obstetric Institution, that it is to the indefatigable Principal of the Grant Medical College, Dr. Morehead, that the public is indebted for suggesting the formation of this important addition to the means of instruction in the noble institution over which he presides, and this valuable refuge to the poor women of the Presidency requiring medical skill and care in their hour of danger. It has been he, too, who has watched the progress of the work now completed, and smoothed away any difficulties that have arisen."

By way of recording the debt Bombay owed to Dr. Morehead for helping to provide this lying-in ward to the Jamsetjee Jejeebhoy Hospital, it was decided that, in addition to the tablets commemorative of the sources from which the funds for the establishment of the institution had been derived, there should also be a tablet bearing the following inscription: "To Charles Morehead, M.D., Principal of the Grant Medical College, the Public is indebted for the suggestion that this Institution should be provided, and for untiring exertions in superintending its establishment."

The means of instruction afforded by Grant College were thus ample. With the *results* Dr. Morehead more than once declared himself disappointed. One of the chief causes for this comparative failure was in the deficient preparatory education of the students; the deplorable effects of which were seen, as Dr. Morehead stated in one of his addresses, not only in the Grant College, but equally in the Bengal Medical College and every other collegiate institution in India. An attempt to influence the training in the preparatory English schools by raising the standard of the College matriculation examination failed. This defect of early training, together with the want of steady attention on the part of the students at the College, made Dr. Morehead complain that there was a great disproportion between the results and the opportunities. But his chief regret was that the native graduates, whether of Bombay or Calcutta, did not devote themselves to their profession with that conscientious industry which gives such a high tone to the medical profession in England. In a passage of one of his addresses he says that he had carefully watched among the graduates of both the Bombay and Bengal Colleges for any indication of this right spirit, but had found no evidence of it. "There is," he says, "generally existing in their minds the conviction that with the close of the College curriculum, there is completion of education. This is, indeed, the rock on which the Indian student generally wrecks his prospect of being really useful in the practical affairs of life. . . . At the period when, in civilised Europe, the real education of life is only about to begin, he conceives himself to be already perfect, enters upon projects for teaching his more ignorant countrymen, regenerating his country, and lays claim to the consideration and honours which in other countries are only aspired to by, and accorded to, the tried and ripe intelligence of manhood. This is to be deplored; for, unless it be corrected, unless the fallacy be removed, there can be no real, steady, progressive advance in the civilisation of India."

As the Bengal Medical College had been utilised for the instruction of the subordinate medical establishment, so it was to be expected that Government would wish to turn to account the educational opportunities of Grant College for the training of the subordinate service of the Bombay Presidency. Accordingly, in 1850, measures were adopted for effecting this object. Fifteen of the

most intelligent medical apprentices were attached to the Jamsetjee Jejeebhov Hospital, and received instruction in Grant College in anatomy, chemistry, and materia medica. For the immediate object the policy was successful, as these student apprentices thus received a very thorough training. Dr. Morehead, however, saw a danger in the introduction of this class of students; and in the next Report he added, with regard to the change, the warning that, "though a very useful and expedient purpose, it was altogether secondary to that highly important and national object, the improvement of the defective medical practice in the provinces of Western India, which the establishment of this College was intended to accomplish." And, again, in another Report two years after, when the number of student apprentices had further increased, he pointed out the danger which would result if the number of College students much exceeded that which the hospital was capable of adequately instructing, in which case the efficiency of the clinical system, and of necessity of the medical school, would begin to decline. And he went on to say: "Such, however, I apprehend, is not the popular idea, nor that generally entertained by the high authorities who control and regulate the medical colleges of India. They, if I mistake not, would judge that school to be the most successful and the most efficient which showed the greatest number of students on its rolls. The true test of the efficiency of a medical school is the just relation being observed between the number of students and the clinical means, and the right use of these means. As soon as this relation is deranged on the side of numbers, the school must necessarily begin to decline. My belief is that the clinical means of this school are sufficient for a roll of fifty students. If these numbers at any time

become much increased, and the clinical means remain as at present, I venture with much confidence to express a very firm conviction that from that time the efficiency and usefulness of the school will begin very sensibly to decline, and that the object of its institution, viz. the giving to the people of this Presidency a class of truly, not merely *nominally*, qualified medical practitioners will soon cease to be realised."*

Indeed, with increased numbers it would be difficult for the Principal of the College to get an Examiner's Report couched in the following terms : +-- " On these important subjects, and particularly in medicine, the students gave convincing proofs of their admirable training, and of the extraordinary care and systematic fidelity and attention with which they have been instructed." It was thus Dr. Morehead's first care that the graduates of Grant Medical College should go forth fully qualified to practise medicine and surgery, and, being satisfied of their fitness to do so, he was wont to use his whole influence to help them to found a practice. And, with this view, from the day the first batch of graduates received diplomas, he discontinued his own private practice, and, if invited afterwards to take a case, he would often say in refusing: "So-and-so," naming one of his former pupils, "is well qualified, and lives near you; apply to him. If he needs my advice and help, I will gladly give it to him."

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^{*} In a letter, written in April 1854, to Dr. Alexander Grant, who was then Secretary to the Bengal Medical Board and Surgeon to the Governor-General, Dr. Morehead wrote, "I will send you a copy of the last College Report, and write to you also, because there is one point I should like Lord Dalhousie to be impressed with, the absolute necessity, to the efficiency of a medical school in India, that the number of students be not in excess of the clinical means."

⁺ Report by Dr. Don in 1854.

This trait of Dr. Morehead's conduct is thus referred to in a Bombay paper : "Dr. Morehead had a large practice among the native public, which he gave up as soon as the first batch of graduates was passed and declared qualified to practise medicine. And, as a rule, he never afterwards took up a single native case, except in consultation with a pupil of the Grant Medical College. Such was the veneration in which Dr. Morehead was held, that even three times the amount of fee would have been willingly paid, if accepted. But he had chosen his path, and followed it on principle. Dr. Peet, in time, walked in the footsteps of his great predecessor. Dr. Giraud took, we believe, no practice among the native public at all. And the living enthusiasm, deep research, and high attainments of his lamented successor,* are not likely soon to be equalled within the College walls."

Thus, before Dr. Morehead left India, the aim of Sir Robert Grant had been, to some extent, realised; the people of Western India had been given a practically and well trained body of medical practitioners, who by skilful and conscientious exercise of their art so recommended themselves to their countrymen as to take the place of the Hakeems and Weids who, from want of adequate education, were necessarily incompetent to exercise medicine and surgery with safety and success. Before Dr. Morehead left India, "there were thirty-three graduates of the College practising in Bombay, and two in the Mofussil; and nineteen in the employment of Government or of native Princes, and nearly all resident in the Mofussil, and in charge of civil dispensaries. Several of the private practitioners in Bombay were receiving from Rs. 700 to Rs. 1,000 a month, and none realised less than Rs. 150 to Rs. 200."

* Dr. Haines.

The institution, organization, and early results of Grant College have thus been described at length, because they constitute the chief work of Dr. Morehead's life; and the account of this portion of his life may well be concluded by quoting the, so to speak, official tributes of praise paid to him when his connection with the Grant College ceased. Thus, in 1857, when Dr. Morehead was transferred to an acting appointment as Superintending Surgeon at Poona, and it seemed unlikely that he would again revert to his former charge, Dr. Giraud, who was then acting as Principal, thus spoke of him: "When it is remembered that to his exertions, under the approving eve of the enlightened statesman whose name it bears, this College owes its very existence, that under his wise and cautious, and yet liberal and practical management, it has grown into so complete an institution that it may challenge comparison with the medical schools of Europe, it will be seen that his removal to another sphere of duty is an event which could not be passed over in silence; especially by one who counts it among the greatest privileges of his life to have been for so many years associated with him, and who, in common with every other professor and every student, has found his sagacious, kind, and willing counsel, and his bright and active example, a sure and safe guide in difficulty, and an everpresent stimulus to exertion. But any expressions here recorded of the veneration and esteem in which we have held our Principal, are utterly inadequate to represent the depth of our grateful feelings."

After Dr. Morehead's final retirement, his successor, Dr. Peet, in his Report for 1860-61, thus made mention of him: "Before detailing our proceedings during the session, I desire, upon the part of my colleagues and myself, to record our deep sense of the loss we have sustained by the retirement of Dr. Morehead from the office of Principal. Compelled by ill-health, in the year 1859, to seek for change of climate, his connection has now finally ceased. Associated as I have been with Dr. Morehead for many years, as a colleague and a friend, it would ill become me to speak of him in terms of eulogy; but it is impossible, in justice to the College or myself, that we can be content with a simple announcement of his retirement. Not only was the College organized and matured by him with an amount of forethought and judgment which have been rarely equalled, but scarcely a step has been taken towards its foundation with which he is not identified. Enjoying the privilege of a close personal friendship with the distinguished individual whose name it bears, and to whose memory it has been erected as a tribute, he was an active participator in every measure that was adopted by Sir Robert Grant for establishing a system of medical education in the Presidency. Entering upon his duties at an age when judgment is ripened by experience, he engaged in the performance of them with the vigour and enthusiasm which every man feels in carrying out a scheme of hisown creation. His success has been unmistakable; not only is it known in this country by its fruits, and by the testimony of all who are capable of judging of it, but it has been acknowledged in another place, by the selection of Dr. Morehead for appointment to one of the most honourable offices * that can devolve upon a teacher of medical science. But now that we are bidding our late Principal 'farewell,' we do not think of him only as the successful teacher. We, both Professors and Students,

^{*} In 1859 Dr. Morehead was offered the Professorship of Clinical Medicine at Netley.

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cannot but call to mind his unvarying kindness and sympathy; his deep sense of justice and of duty, his truthfulness, his consistency, his self-denial. Never led by impulse, with a mind regulated by the closest selfdiscipline, during a period of fifteen years that I have been associated with him, a murmur was never uttered either by his colleagues or his pupils against the justice of his decisions. Greatly as all who have the promotion of education at heart must regret Dr. Morehead's departure, they have the satisfaction of knowing that his influence does not wholly depart with him. He leaves behind him the results of his experience in a medical book,* which, whilst it has raised him to the highest rank as a pathologist and a physician, will exercise a lasting influence upon the study and practice of medicine in this country."

Dr. Morehead's constitution, though originally strong, was gradually impaired by the unhealthy climate of Bombay, and by his habits of constant and strenuous application. He had lived and worked in India continuously a quarter of a century when, in 1854, or nine years after the opening of Grant Medical College, he was obliged by ill-health to apply for furlough on sick certificate to Europe. The day before his departure he was presented with an address by the students and graduates of the College, expressing the affection with which they regarded him.

Dr. Morehead's leave was, in the first instance, granted for a period of one year, but was afterwards extended for six months, partly with a view to his bringing out his work on Indian diseases, which will presently be described. His diary for this period contains records of visits to

* Clinical Researches on Disease in Indi

some fifty different medical schools and hospitals, in which he carefully observed and noted any features which suggested themselves to him as possible improvements to be adopted in Grant College or Jamsetjee Jejeebhov Hospital. As to general principles he was not led to alter his former views. He thus records his impressions of English medical schools in 1854: "I think the class of medical students better in London than in Edinburgh. The system of hospital attendance compared to that in India is certainly inadequate, *i.e.* three a week for Surgeon and Physician. What would we, with our daily two visits in India, think of that? The explanation is the gratuitous character of the attendance in England; its being quite subsidiary to private practice. A clinical system related to such a condition of hospital attendance must be defective. The Calcutta system has partaken somewhat of the laxity of the English system, but that of Bombay has not at all. Hence its greater completeness."

Early in 1853, during three months' leave Dr. Morehead had also the opportunity of contrasting the systems of instruction prevailing at Madras and Calcutta. After a visit to the General Hospital at the former Presidency, he made the following entry in his diary : "Dr. A---'s medical clinical visit.-The patients in great part European; and the advantage that we have in clinical instruction, in being able to speak freely before the patients, struck me much. On points of practice he spoke sensibly, but there is evidently no close system of clinical instruction, yet they think it efficient. My impression is that our students do not make nearly so much of their advantages as they ought, and that we give more application to the subject; and I fear much of it is lost from the poverty of much of our material. . . . Again I would state my strong impression that, for all the seed we sow, we do

not, from inattention in our students, reap proportionate fruit."

"I have no doubt in my own mind," he writes, "that the College suffers from there not being an efficient responsible single executive individual; the Council is a bad substitute; nothing can be more striking than the fact that no individual knows anything but of his own department. This makes it difficult to acquire information."

An interview which Dr. Morehead had with Lord Dalhousie, the Governor-General, at this time, is recorded in his journal. The Governor-General is described as "very agreeable and kind; simple, natural, with good manners; very gentle and manly." He "alluded to the College at Bombay, the Hospital here, and the proposed new buildings for the College; then to the undoubted good to the country from the Bengal College-his own observation. His views regarding the employment of the English pupils; would not make them professors, as leading all who might go to England to look for the same. . . . Conversation then on their private practice, and alluded to advantages of our graduates from Parsee community. Then he spoke of vaccination; praised the Bombay system of supervision. I said it was not extended with extent of Presidency, and not so efficient as when instituted by Grant College Medical Society from reduction of establishment; he told me it was to be tried in Calcutta. He first adverted to difficulty of preserving lymph in the northern Provinces; told me of six Burmese children and their mothers having been sent by a Missionary Society, vaccinated, and returned home. I adverted to Dr. Jenner's contemplated plan of transmitting the vaccine to India. Then the question of legislative enactments, requiring inoculation; disapproved of them, as

impracticable to carry out, as not certain that inoculation was not better than nothing. I said the question could hardly be considered, unless preceded by an efficient system of vaccination. That, he said, had been quite his view. . . Asked me when I was going back; whether Lord Falkland was going to stay. I stated the impression that he wished it. He said he knew he did; he made no secret of it. Said he had been glad he had seen me,—and so it ended."

When Dr. Morehead was about to leave Calcutta, he made a careful *résumé* of his opinions on medical education as carried on there, the Principal of the Bengal College having asked him to give his unreserved impressions on the subject, and whether the Reports of the College had been sufficiently impartial. The following is the note in Dr. Morehead's journal :—

"General disappointment in the aspect of everything connected with the College. The physical and intellectual feebleness of the Bengalee student. The too little respect with which the graduates are treated; there is no attempt to give them a more independent bearing and sentiment; my shaking hands with them was an innovation; and yet, as students, they are too much left to their own devices; hence the neglect of hospital attendance. The opportunity given to cramming at the end of the session. The mode in which the military class usurps the practical materials of instruction. 'The neglect of chemistry and practical pharmacy. Now, as regards the College, the anatomical materials ample, most ample-indeed, too profuse; it leads to a careless use. The rooms, dirty. The characteristic of everything medical I have seen in Calcutta, is want of cleanliness, order, system, tidiness. . . . Dr. Mouat told me that he had inspected the Government Dispensaries in the North-

West. The character of the sub-assistants was, in almost all cases, good for surgery; that is, as far as regards a few operations, lithotomy, &c.; but, medically, imperfect; the people had no confidence in them, and they showed no practical ability. This is what I have all along felt must be the case, and it is satisfactory to find it proved, to find confirmed the feeling I have always had, that we will make nothing permanently good of our medical colleges, at least, not what it should be, unless we form honest, good, practical men in medicine and surgery; and there is only one way in which this can be doneby an extensive hospital arrangement, and by assiduous and honest application of it by really sound experienced practical teachers, who will labour with patience, temper, and love. But where are these to be got? This is the great difficulty."

All the hospitals, dispensaries, and medical schools which Dr. Morehead visited in Egypt, Italy, Switzerland, France, Germany, England and Scotland, are described, or rather criticised, in much the same way in his diary. Even after his final retirement from the Indian service, he maintained his interest in systems of medical education.

Thus, by the experience of his own work in Bombay, and by his observation of other schools, Dr. Morehead was one of the most qualified to give an opinion on questions respecting medical education. Accordingly, when the whole system of medical instruction and education was being considered by the University of London in 1860, Sir James Clarke applied to Dr. Morehead for his counsel.

Replying to Sir James Clarke, Dr. Morehead wrote: "Scheme I have none to suggest. There seemed to be a pretty general agreement on what, I fancy, are the lead-

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ing principles. (1) Improved preliminary mental training; (2) practical examination so as to force practical teaching; (3) no further subdivision of examination, which tends to destroy the habit of viewing the various branches of medical study in their just connection to each other."

It was one of the characteristics of Dr. Morehead that he was always seeking to add to his stock of knowledge, and that he was constantly making observations with a view to turning them practically to account in his own sphere of action. Moreover, he made a point of always recording, if not publishing, all conclusions of any importance to his work, which he might have arrived at after mature consideration. In a Grant College Report, after describing certain alterations he had introduced to remedy defects in the system of instruction, he says: "They are, it is true, not very important, and might easily have been corrected without this formal record; but I have thought it well to adopt the present course, believing it to be the duty of everyone who is engaged in practical pursuits to place the results of his experience, however limited, at the disposal of those who succeed him in the same pursuits. It is in this way only that steady progress can be made."

In 1856 Dr. Morehead returned to India, but not to preside for any length of time over Grant College and its neighbouring hospital; for in 1857 he was removed to Poona, to act as Superintending Surgeon, an important post at that time, when the Mutiny put to the strain every part of the Indian military organization. The duties of the post are thus described by the then Secretary to the Principal Inspector-General, who possessed peculiar opportunities of becoming acquainted with the work of administration as well as executive medical officer: "Troops, as they arrived in Bombay for the suppression of the Mutiny, were despatched by rail to Poona, where they were equipped for field service, and rapidly pushed on up country. The strain on the Medical Department for subordinates and medicines was great, so that the establishments were weakened and partly disorganized. Forethought, energy, and tact were required to cope with the sudden and overwhelming difficulties. Dr. Morehead's services were invaluable, as he was ever on the alert, personally superintended the arrangements, and inspired those under him cheerfully to perform their important duties, to the great advantage of the public service. The valuable aid Dr. Morehead rendered was duly acknowledged by the Head of the Medical Department."

Dr. Morehead returned to his substantive appointment of Principal of Grant College, in 1858; but was soon again compelled, in the following year, to return to England on sick certificate. On his departure his former pupils again presented him with an address, even more appreciative than their former one.

"Esteemed and Beloved Principal," it said, "we scarcely know how to express adequately our grief and sorrow at the painful announcement that you are about once more to leave these shores for your native land, and the more so because your failing health should have rendered such a step necessary.

"Were we certain that we should, at some future period, have the happiness of welcoming you back to the Institution, with the origin and early progress of which your name will ever be identified, and to the success and well-being of which your best days and best energies both of body and mind have been devoted, we could not have parted with you without much pain and regret. But

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conscious as we are of the extreme improbability of our ever having the good fortune of being placed under your fostering care and direction, it is impossible for us adequately to estimate the loss which your departure will entail upon ourselves and our country.

"Of the innumerable acts of beneficence and mercy which have characterized your long and honourable career in India, and the inestimable blessings which you have been mainly instrumental in conferring on her, it is not for us to speak; but we cannot be insensible to the lasting and ever-increasing obligations under which we are placed towards you for the blessings which we derive as students of the Grant Medical College.

"We desire, therefore, to convey to you the deepest sense of our gratitude towards you, and the profoundest sentiments of veneration which we entertain for so dear a person as yourself. We trust that we shall continue to live in your kind remembrance, and that we may always feel that we have a friend in our revered Principal.

"With these few words, and with our heart's desire and prayer for your future happiness, we bid you a solemn and affectionate farewell."

CHAPTER III.

LATER CONNECTION WITH GRANT COLLEGE.

DR. MOREHEAD'S official retirement did not take place till January 1862; and, in 1859, he was offered the Professorship of Clinical Medicine at the New Army Medical School at Netley, instituted for the training of candidates for the British and Indian Medical Services. This offer he finally declined, partly from considerations of health, and partly because the War Office refused their consent to certain stipulations which he proposed regarding his rank as Professor of the School.

Dr. Morehead did not, however, on retirement, cease to take an interest in Grant College, and the students who had there studied under him. He was still held to be their best champion when they felt themselves labouring under any grievance; as, for instance, when he was appealed to by the Hon. Mr. Juggonath Sunkersett, an influential citizen of Bombay, to use his influence towards reversing a late decision of the Government, by which natives were excluded from the Indian Medical Service. Dr. Morehead's reply contains the following interesting remarks :—

"It was a subject of much regret to me that the prospective abolition of an exclusive Indian Medical

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Service should have led to the disappointment of the hopes of my young friend Muncherjee Beranjee, and other Indian graduates from the other Indian Presidencies. The similar step in respect to the Indian Army caused the same kind of disappointment to some of my young friends here, who had been trained for and promised cadetships, but who had not the means of entering the Royal Army through interest or purchase. I mention this that you may understand that the altered system of Indian Government has not affected the prospects of the natives of India only, but has extended also to the young men of Great Britain. I have, however, the belief that before many years elapse, our Indian medical graduates, if they continue true to themselves and their profession, will find that the amalgamation of the services and the gradual extinction of a local European medical service will be for their advantage. Its tendency must be to throw, ultimately, much of the medical duty of India into their hands, such as the duties with native troops, of civil stations, of vaccination, &c. It surely matters little whether, when in the execution of such responsible duties, they are possessed, or not, of a military commission. Their status, under all circumstances, will depend on the degree of responsibility entrusted to them, their professional ability and respectability of character, and not on a military commission. Bhao Dajee, and others, will tell you that, on the question of competing for assistant-surgeoncies, I have held, from the commencement, one invariable opinion, and have never hesitated to express it when applied to. I have always endeavoured to explain that a sphere of usefulness in private life, with the status in a community which necessarily attends it, is the highest object of ambition with medical men in European countries, especially in England, and that a position in the army, or any other public

service, is always regarded as a secondary object; that as the field of private practice, and the position of an educated and high-toned physician, were, as yet, unoccupied in Indian communities, it behoved the Indian graduates to supply this want in the first instance, and, in doing so, to aim at the highest object of medical ambition.

"You know how, from the commencement, I became identified with Sir Robert Grant in this question of medical education. I shared his opinions and his principles, because I believed them to be right, and, while connected with the College, I never ceased to hold them. The object which Sir Robert Grant had in view in advocating the establishment, on the liberal footing which was adopted, of a medical college was, that the advantage of an educated and an honest profession of medicine might be extended to the people of Western India. He knew that this could not be effected without securing a liberal provision and a good social position for the native physicians, that is, the agents engaged in carrying out his contemplated measure of philanthropy. But individual interests were not with him the leading and primary object of the Medical College. According to my manner of viewing the subject, the best interests of individuals and the public good fully harmonize. Those who think otherwise, however, and consider that a commission in the army is a better provision for the graduates of the Grant College, forget that they are at variance with the primary object of the institution, and that they lose sight of the philanthropic policy which alone justified the liberal footing on which the College was established.

"You will not, I fear, thank me for these sentiments, but you will, I trust, give me credit for consistency, candour and sincerity. Though we may not think alike on some points, and though I am no longer in a position
to prove my continued interest in the advancement and prosperity of a people among whom the best days of my life have been happily passed, you will, I hope, believe that it still exists unabated, and that my thoughts often revert to my kind friends and my congenial pursuits in Bombay," &c.

It was mainly due to Dr. Morehead's representations, and the co-operation of Dr. Parkes, the Professor of Military Hygiene in the Army Medical School at Netley, who was a member of the General Council of Medical Education, that the claims of Grant College, as a medical educational institution, were recognised in 1870, its diploma being then accepted by the Medical Council equally with the diplomas of the medical schools of the United Kingdom.

There were, moreover, several of the graduates of Grant Medical College who came to England and experienced kindness at the hands of Dr. Morehead, who was always anxious to show interest and sympathy in these young Indian students at a time when they most wanted it, being away from their country. He even extended his kindness to the sons of his former pupils, as is to be seen from the beginning of a letter he received from Dr. Blaney. The letter, which is dated 20th June 1871, reads thus: "Few incidents in my life have afforded me more gratification than your letter of the 19th of May. I wrote my former letter in some uncertainty as to how it might be received, and yet I must confess I should have known you better than to have entertained any doubt of a cordial recognition. It is indeed a pleasure to know that time and new associations have taken away none of your regard from your humble fellowlabourers of a quarter of a century ago. My wife joins me in thanking you for your cordial reception of our dear

boy. The absolute separation that subsists between us naturally causes us to feel especially grateful for any kindness displayed to our children. You who have been so long in India, do not require to be assured of what our own feelings must be when we learn from our son that you have welcomed him for the sake of an old pupil and subordinate, and that you have appeared pleased to see him."

In 1872, in a letter to Mr. Lisboa, one of his early pupils, Dr. Morehead refers to another incident showing his kindness and sympathy towards students of Grant College, previously unknown to himself, who had come to England to complete their medical studies. "I have," he writes, "been visited by two Parsee students of the Grant Medical College, who have gone to Aberdeen to complete their studies, and I have advised and assisted them as far as I could. But all this is wrong, and seems to imply that the means of being educated in India do not exist. A hospital in this country is not the practical school for those who are to be physicians to the natives of India, at least, for the foundations of their principles and practice. I quite approve of Indian graduates, whenever they can, enlarging their experience and knowledge by a year or two in this country; but the foundation should be Indian. Judging from the dispensary system now in vogue all over India, medicine and surgery have become very simple matters. It will very soon be found that the only difference between it and the old Weid system which Sir Robert Grant and others wished to correct is that the evil has become extended and bears a Government stamp."

The conclusion of this extract expresses the disappointment felt by Dr. Morehead at the perversion of the principles on which Grant Medical College had been instituted. By constant reiteration of these principles he had done his best to keep them in the mind of the Government. But Governments in India are ever fluctuating; and the danger of first principles being forgotten was early foreseen by Dr. Morehead. In the first flush of the early success of the Grant College in 1851, he had carefully placed on record the following remark: "Who, I should ask, that has lived in this country (India), has not witnessed well-digested plans of public good marred in their execution, simply because, in the changes of Government and the fluctuations of Society, the grand principle on which they were based has been forgotten and overlooked, and its place usurped by secondary and subordinate purposes." After this introduction he had stated in the clearest terms, such as have been already quoted in this Memoir, the real and true principles on which the College had been founded, and the philanthropic policy which alone justified its institution. But after Dr. Morehead's departure, these first principles began to be forgotten. Indeed, two years after, contrary to his advice and in spite of his warnings, vernacular classes for the instruction of native students in Marathee, and afterwards Guzerathee, were added to the scheme of the Grant College. His own attitude towards this innovation was thus described by Dr. Morehead: "About a year after my retirement, in 1859, from a fourteen years' tenure of the Principalship, the idea was conceived of adding a Vernacular Department to the College. The subject was discussed by me with my successor, Dr. Peet, by letter in the form consonant to the official and friendly relations which had subsisted between us for many years. I argued against the measure, urging that it was an error in principle, certain at some time or other to prove detrimental to the original and main object of the insti-

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tution. The vernacular class was, however, established, and has since been in great favour with the authorities of the College, the Department of Education, and the Local Government."

For a time, indeed, Dr. Morehead's successors wereactuated by the same self-devotion and enthusiasm as had been characteristic of himself; but, after 1866, the tone of the institution seems to have declined; at least, so thought those who were most interested in the success of the Grant College. The following extract from a letter to the Times of India, in February 1871, gives a specimen of this feeling of regret : "I have one or two things to mention in addition, which fully bear out the superiority, the earnestness, and efficiency of the old system of lectures, class and annual examinations, and clinical instruction planned by Dr. Morehead, and zealously carried out by his immediate successors in the College. By the great earnestness and zeal with which they performed their task, by their sense of honour and their just and impartial decisions, by their sound practical instructions and their superior attainments, by the entire absence in them of pride or presumption, I say, by the possession of these noble qualities, the names of Morehead, Peet, Ballingall, and Haines will ever remain so dearly cherished in the hearts of all their pupils."

Very soon after Dr. Morehead's retirement, Grant College, along with most other educational institutions of Bombay, found that it had fallen upon evil times. The sudden opening of new routes of communication with the interior, the pushing forward of great railways and other public works, and, above all, the immense impetus to cotton cultivation, and to trade, in the Presidency, which was due to the shutting of the American ports by the Civil War, all these things turned men's minds to com-

merce, and other money-making pursuits, rather than to intellectual occupations. This derangement of social conditions was not at once remedied, as far as regarded the prospects of Grant College, by the collapse of credit and consequent widespread ruin which dealt such a blow at the progress of Bombay in 1866-7. As a consequence of the disjointed state of society, the number of students in Grant College declined; whereas in 1856 there had been forty-seven regular students, twenty-three student apprentices, and eight hospital assistants, in 1866 there were only twenty regular students, twenty-nine student apprentices, and twenty-five of the new vernacular class. Still, though the numbers had declined, the education had been carried on with the same spirit, and the results, as regarded the efficiency of the graduates, were not unsatisfactory. But then, from one cause or another, a change for the worse in this respect, also, set in. A writer in Native Opinion, in April 1871, thus described the present condition of the College : "The system seems to have lost its tone. We have the courses of lectures, the orthodox terms and attendances, the wards and their paraphernalia, but the spirit seems to be gone. The enthusiasm, the high professional feelings, the tone and the discipline seem to have either departed or to be dormant."

To Dr. Morehead, the decadence of Grant College, which had been so especially his own creation, and was still the object of his affectionate interest, was the source of unfeigned disappointment and regret; and he was likewise disappointed at the collapse, as it then appeared, though it was afterwards revived, of the Medical and Physical Society of Bombay; this collapse, too, being chiefly due to the want of interest on the part of the medical officers of the Jamsetjee Jejeebhoy Hospital and

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Professors of Grant College, who, in Dr. Morehead's time, had been its principal supporters. It would not have been characteristic of Dr. Morehead to watch the prospects of the medical profession in Bombay decline without raising his voice and exerting his influence to rescue it, if possible, from further declension. And so, after some thought as to what might be the best means of striking an effective blow, he determined, on his own initiative, to write a memorandum to the Secretary of State on the condition of Grant College. This memorandum he afterwards printed, with a preface, dated October 1870, explaining his reasons for writing and publishing it.*

It was, perhaps, natural that this publication, however carefully drawn up, should not please the then Principal of Grant College; at any rate, on the next presentation day of the College, the Principal, Dr. Hunter (now Sir W. Guyer Hunter), took the opportunity of replying, in his Report, to Dr. Morehead's criticisms-"strictures," as he called them, though they had been quite impersonal in character; and his roseate views of the existing state of the College were reflected by the representative of the Government who presided on the occasion, the Hon. Mr. Tucker. Upon this, Dr. Morehead wrote a further note, which he circulated privately, declaring that he had been unable to find anything calculated to modify, in the least degree, the argument in his memorandum. "On the contrary," he said, "I observe further foreshadowings of decay, not only in the increasing numbers, but also in the misconception of principles and the quantitative idea of prosperity which pervade the Report and the speech of the chairman."

^{*} It is reproduced in full at the end of this Memoir as Appendix II.

The Bombay Native Press took up the matter with considerable interest, for a considerable period; and the letters of the early graduates testified to the admiration and affection with which Dr. Morehead was regarded by his former pupils. At the next annual meeting of the Grant College, it was evident that Dr. Morehead had gained ground; the officiating Principal, acting in Dr. Hunter's absence, referring to him in the following terms :--- "The system of teaching, as at present pursued here, is that inaugurated by Dr. Morehead, except that it is wanting in the strict supervision he exercised over both professor and student; such strict supervision over our increased numbers in these days would be impossible. and, if exercised over the Professorial Staff, would be less patiently tolerated. Since Dr. Morehead's day, we have multiplied the subjects to be taught, and each subject has become a much more extended science. The College is, no doubt, adorned by this multifarious learning, and the memory of the students is, moreover, enlarged, but it is at the expense of faculties indisputably higher. We have but fallen into a very practical error, viz. that of teaching so much that little is properly learned. Most of our graduates leave us with minds distracted by the unmeaning profusion of subjects set before them. As a rule, they hold all we teach them on faith, commit all to memory, and, when their examinations are passed, lose almost entirely the result of their labours. It is the dexterous gleaner in the narrow field that reaps the most thorough education. . . . The poor success of our candidates at the University examinations is, I believe, mainly due to the dissipation of mind I have alluded to, as well, perhaps, also to the fact that from the increased numbers, they receive from their professors less support and stimulus than formerly. Few students in this

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country can dispense with such support and stimulus; they do little, indeed, if left to themselves."

The next College Report showed that Dr. Morehead had won a victory along the whole line, Dr. Sylvester, as acting Principal, saying : "I have been induced to remark that the state of the school is not discouraging, because Dr. Morehead, the first Principal of this College, wrote to the Times of India, in March last, stating that the University system of India, and the vernacular incubus, had brought this school to a state of 'pitiable decline.' Dr. Morehead may be fairly called the pioneer of medical education in this country. Not one of his successors has ever laboured here as he did; not one takes the lasting interest in the success of this institution which he continues to do. He was an enthusiast, and procured an amount of zealous work from those who taught with him that is not likely to be obtained again, while the present system of allowing teachers to eke out their insufficient salaries by private practice is continued on this account. Dr. Morehead's opinions are entitled to great respect, and, I am sure, are held in the highest esteem by those who graduated under him in this College. Dr. Morehead's objection to the vernacular incubus I believe to be well founded, and those classes press us sorely in our need of space."

The Chairman, the Hon. Mr. Tucker, who again presided, confessed himself in his succeeding speech to have been converted. "We have heard," he said, "from Dr. Sylvester that, in his opinion, there is some foundation for the report that the scheme of instruction imparted in the College is not so sound and deep as it could be wished to be; and he has told you that he considers some subjects might be advantageously omitted from the conrse, and a more strict and penetrating knowledge insisted upon in the others. I regret that this should be so, for it, to a certain extent, confirms Dr. Morehead's views on the subject, which, up to this time, I had thought were without sufficient foundation."

It proved how much Dr. Morehead was still appreciated in Bombay nearly twenty years after he had ceased to act as Principal of Grant College, that the very mention of his name was, on this occasion, received with loud cheering. Dr. Morehead, wishing still further to complete his success, and, in his desire to secure to the institution its old efficiency, wrote to Mr. Tucker explaining his views on the subject; but, learning afterwards that Mr. Tucker was on the point of leaving India finally, he sent a copy of his letter for publication in the *Times* of India.*

And, writing soon afterwards to one of his early colleagues, Dr. Morehead, after speaking of this letter to Mr. Tucker, and expressing his conviction that "the day of reckoning was inevitable," if the policy of sending out imperfectly educated youths, yet accredited by the Government, were continued, says: "I went over this subject with Edward Goodevet the other day, and I found that his Bengal mind ran in the same groove; indeed, not three days since, in the Times' Indian correspondent's letter, there is mention of the ignorance and delinquency of the native assistants in the famine and fever districts. How any sound intellect, with any knowledge of medical education and practice, and of the moral constitution of the Indian mind, can fail to see this, is beyond my comprehension. . . . In regard to vernacular text-books, I said they were

^{*} This letter, which is dated 11th March 1874, will be found as Appendix III. to this Memoir.

⁺ Late Principal of the Calcutta Medical College.

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useful, but that the only way of convincing the people of the good of medicine was by the demonstration of its usefulness and success, and the only way of doing this was being careful that you did not accredit any who were not thoroughly qualified for this practical demonstration."

Three years after this letter, in 1877, Dr. Morehead had the satisfaction of knowing that his advice had been so far followed, that the vernacular classes were being removed from the Grant College to Poona and Ahmedabad; but that he was not yet satisfied with the education given at the College may be shown by an extract from another letter to the same former colleague. dated the 21st of February 1877: "So far it is well. The vernacular incubus is in process of removal; but I do not think that there is anything encouraging in the Principal's Report or Mr. Gibbs' speech. . . . The impression left on my mind from the Report is that the College, as a practical school of medicine, or, rather, as a school of practical medicine, is in a rotten condition, with little chance of being recovered from it. I shall ask Atmaram to tell me what the Medical and Physical Society is about. You will always remember that Atmaram and self started together with it forty years ago. Thirty-first Report of the College !---it is an old story, but I do not feel it so; and yet it is not an agreeable retrospect. It is not pleasant to have your garden of roses ploughed and harrowed over, and planted with hemlock and thistles; and yet there may, or perhaps must, be some good end to be worked that we cannot fathom. I feel much in the same way towards the present method of Indian Education, and to much of the policy-too much clap-trap, too much of the fashion of the hippodrome and the pantomime."

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A year afterwards, 3rd May 1878, he wrote again, in a less disappointed strain; and with this extract, this phase of Dr. Morehead's life may be concluded: "I send you what I conceive will be my last say regarding Grant College, partly as an antidote to previous growls, partly because it is, as yet, more a matter of promise and prospect than an accomplished fact." What Dr. Morehead thus called his last say was an article in the *Edinburgh Medical Journal* for May 1858, reviewing the last two Reports of Grant College, which concluded with congratulating Grant College on the course of usefulness and honour, lying before it in the future, as the certain fruit of able administration, an appreciative Government, and a grateful people.

An extract from the Report of Grant College for 1882-3, may be in place at the end of this chapter. In a retrospect of its history, the Principal, Dr. H. Y. Carter, says: "In 1845 this institution was inaugurated with a total of 12 students. During the succeeding five years the annual totals were 13, 18, 17, 22, 27. Numbers thence fluctuated greatly until 1866, when, from an almost minimum of 14, they have steadily increased to a maximum in the current year of 283.* . . . Undoubtedly the highly creditable success of the early College graduates was largely due to the intimate teaching then practicable. The present Report cannot be ended without a due allusion to the recent lamented demise of Dr. Charles Morehead, the sagacious organiser, and for fourteen years the widely-honoured Principal of Grant College."

^{*} The numbers have still further increased, according to the Report of 1883-4, to 289, besides an altogether new class of female students, already numbering 12, 7 being Christians and 5 Parsees. The demand for more space is very strong, the increasing classes having quite outgrown the means of instruction.

CHAPTER IV.

WRITINGS AND LATER LIFE.

DURING his connection with the Medical and Physical Society, Dr. Morehead had contributed frequent papers to its Transactions. Many of these dealt with cases which he had had opportunities of observing in the European General Hospital, and in the Native Hospital, of which he was Chief Physician, and, in his own words, he "had long entertained the desire of contributing to the resources of practical medicine in India." Writing in December 1853, to Dr. Grant, he said : "And now I am going to trouble you with views and speculations of my own. You know the importance I attach to the clinical department of our medical schools-my belief that the success of the Government scheme of medical education, if it is to be measured by the advantages it confers on the people, must be contingent on the real practical fitness of the graduates. If so, then there is an important want yet to be supplied; we must, I think, all acknowledge that there is no work on the diseases of India that represents the present state of medical practice, none that attempts to modify the application of its principles to the peculiarities of native habits and constitutions. The

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graduates, therefore, have not, at present, after they leave College and enter upon the duties of their profession, that assistance which the writings of practical men are calculated to give. They have no good book of practice to which to refer. It has always seemed to me that the basis of a practical work of this kind ought to be the accumulated records of our clinical wards. With this view all the cases of the clinical wards here, during the six years that clinical instruction has been in operation, have been carefully preserved and arranged; and I have looked to the time when I might be able so to digest and shape them, as to make them generally useful. Whether in the form of Reports, similar to those written by me of some of the important diseases, or in some other way, is a question of detail I have hardly yet fairly considered. Then I have thought that my Reports of the European General Hospitals, and the notes and information I have collected from other sources, might be brought with advantage to bear on the same practical end. The object in view, however, has not reference merely to the graduates of Grant College, but has relation to those of India generally. It was partly under this feeling, that, last cold season, I visited Calcutta and Madras that I might have the advantage of observing the medical institutions in those places, and, by personal intercourse with my professional brethren, learn something of the tone of medical opinion and practice among them; and, with the same view, I have it in contemplation to travel in December and January 1854-55, from Bombay to Calcutta, by Agra, &c., and see you all again. This contemplated completion of clinical instruction I have always felt will be best done in England. There is not time for it here. Moreover, it should not be done till there has been the opportunity of observing the

medical institutions as they now exist in Europe, and of noting the tone of medical opinion and practice in England and elsewhere; not that one's practical conclusions regarding the diseases of India are to be influenced thereby, but this extended experience must serve to show points of difference and coincidence which it may be of importance to notice. It must tend also to bring the mind up to the level of the subject. My present wish and intention is to leave India for a time, at the beginning of 1855, and to execute the work I have been endeavouring to give you some idea of, before I return-if I return at all. Now, as I shall feel that in carrying out this plan I shall still be engaged in native medical education-I honestly believe not the least important part of it, because more permanent, more widely applicable-I venture to hope that the Government may so far recognise and appreciate the importance of the object as to leave me the privilege of returning to my appointment in the Grant College, should I wish to do so, and of permitting the two years of my absence to count as service. In September next I shall have completed twenty-five years of uninterrupted service. It is not only on account of the personal advantages that I shall be desirous of this indulgence. The support and countenance of the Government will facilitate the execution of the work; and it will proceed with more weight from one actually holding the appointment I now fill than from one who has retired from it and passed into private life; at least, so it strikes me. Now, please reflect on all that I have now written and assist me if you can. I hardly know whether the subject is of such nature and importance as to trouble Lord Dalhousie with it, or whether it is right to do so."

The next extract of letter written in April 1854, also to

Dr. Grant, shows that Dr. Morehead was obliged to modify the plans be had explained in the previous letter. "You must excuse," he writes, "a short note. I have been ill with dysentery and fever, and, though now well of these, am left so weak and unfit for work that I am advised to go to England, and I feel that my leaving India is a necessity. I leave by the steamer of the 20th of May. Lord Elphinstone has, as you anticipated, been very kind, and I go with a year's leave on the new rules. In regard to the book matters, my first object must be the recovery of health. The Medical or Education Board will formally press upon this Government the expediency of the Court being recommended to ask me to stay in England another year to execute that work."

The Honourable Court of Directors accepted the recommendation which was duly made, and granted Dr. Morehead an additional year's furlough counting as service, with a view to his publishing a book on Indian medical practice; and it was, accordingly, under these auspices that the *Clinical Researches on Disease in India* was brought out. Written, as Dr. Morehead says, primarily for the benefit of the Indian graduates who might "often, for many years to come, be placed in positions remote from their professional brethren, and in circumstances ill adapted for the prosecution of pathological research," he felt no hesitation in illustrating his statements with full details of cases that had come under his observation.

But, though the pages are full of the records of special cases, they are not less remarkable for their philosophic views regarding diseases in general. The most important of these are summed up in a passage in the introduction, which will bear quoting:

"In comparing the tropical and temperate climates of

the globe, we find that in the former there are two additional causes of asthenia and cachexia more or less prevailing, viz. the influence of long-continued elevation of temperature and of malaria.

"Malaria is the exciting cause of intermittent and remittent fever, and will be frequently referred to in connection with these diseases. It causes cachexia also, either by means of frequent febrile recurrences, or by the exercise of a slower and a gradual influence on the system.

"We judge of the presence of the invisible agency termed malaria, by certain derangements of the animal system which we attribute to its influence; for as yet all other means of investigation have failed in detecting its presence and determining its nature.

"A certain elevation of temperature acting on the earth's surface, previously moistened, is essential to the production of malaria. It is generated more certainly while the process of drying is going on, and in degree bears proportion to the rapidity with which the process is effected.

"Reference has been made to those asthenic and cachectic states which predispose to disease of all kinds, and the importance of a right appreciation of their influence in the etiology of disease in India will be frequently explained in various parts of this work. Malaria has also been named as a predisposing and exciting cause, and it now remains for me shortly to allude to the other ordinary exciting causes of disease in India. Of these, external cold is the most common. In judging of the facility of the reduction of the temperature of the surface of the body in India, we must bear in mind the diminished power of generating animal heat in warm climates or asthenic states; that consequently in these the temperature of the surface of the body may become reduced

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under degrees of external cold inadequate to produce this effect in colder climates or stronger constitutions.

"It has been already hinted that the general type of disease in India, both in Europeans and natives, is asthenic; therefore the law in respect to this, which has been observed in other countries, may be inferred to be equally true of disease in India, viz. that inflammations in asthenic habits are generally characterised by obscurity of symptoms and slowness of progress.

"These features of asthenic disease often conduce, in India, to neglect of application for relief till disorganization of structure has well advanced; and they, moreover, tend to mislead the practitioner in respect to the stage which has been reached, and thus create the erroneous impression that the morbid changes have been rapidly effected.

"This belief in the severity of inflammatory disease in India originating in the manner which has just been explained, naturally gave rise to the doctrine that disease in India required to be met by a freer use of antiphlogistic remedies. But, if the statement previously made, relative to the prevalence of asthenic forms of disease, be correct, then it follows that blood-letting, mercury, purgatives, and all other antiphlogistic remedies, should be used with greater caution, not with more freedom, in medical practice in India than in colder climates."

Having occasion, in the body of his book, to make statements similar to those in the foregoing paragraph, Dr. Morehead added the note: "I write this with confidence, not merely from the negative evidence of success attending the opposite course of treatment; but from the positive evidence of having witnessed the evils I describe. I have before me cases, to be afterwards quoted, of my early practice in India, which prove these truths, and show that they were not then familiar to me."

In one of the reviews, of which many appeared in the leading medical journals of the time, Dr. Morehead's method in this book is described as being "the same throughout, varying only with the number of facts and the extent of the exposition. The prevalence and causesof the particular disease are first exhibited, then the symptoms, and next the treatment. Selected cases illustrate the observations of the text, and hospital statistics. show the monthly proportions of admissions, deaths, &c. As the object is to assist practice, the book is printed so that the cases may be passed by by those who wish tomaster the principles contained in the text. At the same time a catalogue raisonné, in the form of an index, presents a continuous view of the cases, with a reference tothe page where they will be found, for those who may wish to study the particular facts of disease by themselves."

The medical reviews, almost without exception, accorded the book very high praise, of which the two following paragraphs* may be considered as a specimen.

"The medical works which come under our notice are commonly more or less of two kinds; one, written as introductions to practice, more theoretical than practical, more specious—if the products of clever intellects—than useful, ephemeral in their origin, and as ephemeral in their end; the other and the more rare, composed with a totally different intent, and of a totally different character, embodying the results of a large and long experience, making additions to our stock of medical knowledge, and becoming—and deservedly—like the

^{*} Taken from The British and Foreign Medico-Chirurgical Review of January 1857.

works of Hippocrates and Aretæus amongst the ancients; of Sydenham, Laënnec, and, may we not say of Bright, amongst the moderns; a permanent portion of the literature of our profession, treasuries of facts constituting the foundations of the philosophy of medical science. To remark that the work which we are about to review belongs to, or even assimilates to the latter class, is certainly bestowing on it a very high compliment; and yet so much does it display of research, so much of original observation, with other qualities of a high order, that, as we believe, it fully justifies the opinion we have formed of it."

"We cannot finally lay down the pen without expressing the satisfaction we have derived, and not only from the matter-the contents of these volumes-but also from the style of their composition, at once clear, simple, and correct. And we have had a like feeling produced by finding throughout their pages a liberal criticism exercised, or an acknowledgment made of the labours of others in the same field, accompanied by generous notices, and, we have no doubt, just eulogiums, of professional brethren, especially the deceased, who have contributed to the diffusion and advancement of medical science in India. It is pleasing and refreshing to think of the manner in which this science is exercising a beneficial influence in the Eastern world, not limited to India, but extending even from the Bosphorus to beyond the Ganges, even to the 'Celestial Empire'; and whilst, in its immediate action, serving the cause of humanity in the divine office of relieving human suffering, in its indirect and reflex action, promoting the introduction of the exact sciences, and a humanizing and elevating philosophy."

The Clinical Researches were published in 1856, in two

octavo volumes; and, having been well received by the profession at large as a standard authority on the diseases of India, the first edition was sold out in the course of four years. Accordingly, in 1860 a second edition was brought out. It is thus described in the London Medical Review of January 1861: "This second edition is by no means a mere repetition of the first; it is contained in one instead of two volumes; many of the cases in the first are omitted in the second, new ones are introduced, and such a selection has been made, that not much more than half the number are used. All this has been done with great advantage to the reader, and, we think, with no detriment to the book as a work of reference, or as a textbook for the student. The occasional occurrence of typhoid fever in India, which, in the first edition, was said to be unknown, is here recognized and acknowledged, while two chapters on sunstroke and the Hill Sanataria of the Deccan have been added."

The following is a copy of a letter, dated 1st September 1860, Dr. Morehead received from Miss Florence Nightingale, in acknowledgment of a copy of his work which he had sent to her:

I am extremely indebted to you for your kind thought of me in sending me your most valuable work on disease in India.

The opinion of all those whose opinions are really worth having on the subject, unite in testifying to its worth and completeness.

Would you do me the favour of accepting a copy of the new edition of my little work on nursing, and you will much oblige

Yours faithfully and gratefully,

FLORENCE NIGHTINGALE.

P.S.—All who were interested in the Army Medical School deeply regretted your refusal to accept the medical professorship, as an irreparable loss to the efficiency of the school.

As the opinion of one whose opinion was really worth

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having, may be quoted a letter, dated 2nd September 1860, from Dr. Parkes, M.D., F.R.S., and Professor of Military Hygiene at the Army Medical School at Netley: "Two days ago," it runs, "I received the new edition and the old. I put off writing till I could look through the new volume. I congratulate you heartily upon it; it is an improvement on the first edition, which is saying a great deal. When I had read it, the epithet or expression which occurred to me as proper to describe it was that it is a wise book. That deep thought and matured judgment which constitute wisdom is visible in every page, and I much mistake if it is not the greatest gift that the profession in India have ever had. I only hope it will form the minds of all the young men who go out henceforth; and if they imbibe a little of its sagacity, candour, and thorough honesty, what good it will do! But excuse me once more for saying that the regret I have so often felt that you are not to personally influence the future race of Indian surgeons,* came keenly back when I was reading the book. I think the change in the printing is a great improvement, and the book's portability will be a good thing for all locomotive men."

Dr. H. V. Carter, Acting Principal of Grant College, at a meeting of the Grant College Medical Society, at which it was determined to raise a memorial to Dr. Morehead, says of his book : "Taking a brief review of Dr. Morehead's professional life-work as displayed in his *Researches* on Disease in India, some useful lessons may be learnt. We see here the valuable results of indomitable industry, methodical arrangement, and habitual concordance of thought and language; such being the fundamental

^{*} Another reference to Dr. Morehead's refusal of the Professorship of Medicine at Netley.

qualities all must possess who aim at extending the limits (yet too narrow) of medical science. In no slight degree, indeed, industry, mental effort, and exactitude must always be exercised by the successful practitioner; the opposites, incompatible with real advance, being dilatory mental application, and hasty inference from too superficial observation at the bedside. I also find nothing in Dr. Morehead's writings to encourage the crude treatment of disease by merely attending to actual symptoms, at the cost of disregarding the lesions underlying morbid signs. Few writers, indeed, have insisted so much as Morehead upon the importance of principles of treatment; almost every page of his work (well termed a 'great' work by Dr. Parkes) seems to impress this; and there is no doubt whatever, that medical men in India are deeply indebted to our author for a vast amendment of the mode of dealing with disease prevalent before his time."

The part of his book which Dr. Morehead himself considered of the most value is described in a letter, written in 1873, to a friend in the profession, when, after speaking of various medical books, he says : "Do not think me vain if I ask you, at some leisure time, to read with care the Introductory chapter of my second edition. I cannot but think that in the etiology of disease in India I am still considerably ahead of the names you mention. It is on the condition of predisposition that I think them so defective, that is, on constitutional states-their varieties, degrees, causes, and universality of influence. As to the hypothetical entity malaria, I cannot get on without it, in my present state of ignorance, but I should not be surprised if it be proved a phantom. In regard to the diathesis of periodicity and antiperiodic remedies, and the relation of diathesis to malaria, do not let us forget Sam Dickson's Fallacies, and, above all, Balfour's

sol-lunar influence. I told Dickson, much to his disgust, that all his ideas were to be found in Balfour's treatise in the last century, and asked him if he had never read it, &c. You, I have not the least doubt, can and have traced the periodicity doctrines much further back possibly even to Hippocrates."

Speaking again of his work in a letter to his publishers Dr. Morehead says:

"The work is not a compilation; it is a record of carefully digested facts of original observation, has held and still holds a high place as a standard work on Indian medicine, within the scope and aim of its intention. It cannot be superseded in the future, not from any special merit of the author, but because, from changes in the character of the service, the advantages and conditions which he enjoyed are not likely again to be combined in one individual."

Dr. Morehead had, however, been disappointed at the high price at which the book was sold, especially in India, where he had most of all wished it to be within the reach of the students of Grant College. Shortly before his death he wrote to his publishers a letter, from which the above extract has been taken, with a view of making an arrangement with them which, by giving up the author's share of profit on their sale, might allow the remaining copies of the second edition to be sold in India at a cheaper rate without prejudice to the trade. The arrangement could not, however, be effected.

A large number of copies of his work Dr. Morehead sent for distribution, through the India Office, to medical institutions in India, as appears from a letter from the Acting Principal of the Madras Medical College, dated June 1882, in which the receipt of ten copies of Dr. Morehead's book is acknowledged. "Your letter of the 13th April last was received in due course, but remained unanswered until the arrival of the parcel containing the *ten* copies of your well-known work (second edition).

"As a young man, the first edition of your work was very useful to me, and now, after more than a quarter of a century, I hope to obtain some valuable hints from the second edition.

"Whatever changes may occur in the views of the profession, and in the methods of inquiry, your book will always retain its value as a work of reference, seeing that it is a careful record of personally observed facts collected by one whose name stands high as a distinguished teacher, a successful clinician, and a sound physician."

The great purpose of Dr. Morehead's life had throughout been the advancement of medical science and the creation of a scientific Indian profession of medicine, with a view to which the Grant College had been established and so admirably carried on. Upon this object he had, as it were, focussed all his energies; and so, while narrowing the sphere of his ambitions, he had made his activities all the more intensely felt in the space to which he had limited them. He had, on the whole, won a very striking success, and he had proved the possibility, even without extraordinary materials, of imparting to the native mind the kind of practical knowledge, and of endowing it with the kind of professional enthusiasm, which men had previously denied that it ever could attain to, and which is certainly a rare growth in such a soil. And by his work Dr. Morehead had won for himself the kind of reward which gratified him most, the sincerest gratitude and most affectionate regard of his pupils and of those for whom he laboured. This reward he received in a larger measure than he could have hoped for, had he occupied a

similar position in this country. Indeed, it may be said that one of the chief compensations to Europeans for the banishment of an Indian life is the sure opportunity of obtaining, by a career of usefulness and devotion to duty, the meed of "boundless love, and reverence, and regret" of the people they have faithfully served. In English society this is often offered in too stinted measure; whether it be due to the circumstance that England so far expects every man to do his duty, that she will not sufficiently appreciate the self-devotion of a life spent for the public good, or that we have in us less of the faculty of reverence and are less demonstrative in our feelings of gratitude; at any rate the fact remains that in India, where perhaps a loyal devotion to duty is considered a rarer virtue, a career of usefulness, energy, and justice, is sure to be most widely appreciated and admired, and will, through the channels of gratitude, win for itself an influence on the lives of others which is to a great extent denied to it in the more matter-of-fact conditions of English society. Of this appreciation and influence Dr. Morehead had a large portion;* and in them he found his chief reward and gratification; not, indeed, that he was without honour and appreciation at the hands of Government. On the contrary, in 1861 he was appointed to the post of Honorary Surgeon to the Queen, three of these appointments having been at that time opened to

^{*} Referring, in a letter to Dr. Alexander Grant, in 1881, to the late Dr. Goodeve, formerly Principal of the Calcutta Medical College, Dr. Morehead wrote: "The warm expression of his old pupils and native friends are very gratifying, but not more than was to be looked for, because, in my experience, they do not lack gratitude. On several occasions—one or two of them quite recent —I have had visits from groups of young Bombay students, sons and nephews or friends of old pupils, the bearers of kind greetings."

the members of the Indian service. The minute of the Principal Inspector General of the Medical Department, Bombay, in which Dr. Morehead's claims to this dignity were preferred to Government, may be quoted as indicating the very high esteem in which his services were held.

"Surgeon-Major Charles Morehead, M.D., entered the service in 1829, and has consequently served the State for upwards of thirty years.

"Throughout the whole of his career he has devoted himself with zeal and energy to the performance of his professional duties. As the founder of the only society now existing for the promotion of medical knowledge in India, and the contributor of the most valuable papers published by it, he has done much to extend the knowledge of medical science, and to improve the practice of the medical art.

"But his labours have not been restricted to the acquirement and extension of medical knowledge. In conjunction with the late Sir Robert Grant, Governor of the Presidency, Dr. Morehead planned and organized the Grant Medical College, of which he was for fifteen years the Principal, during which period it afforded, under his able management, an education scarcely second to that of any similar institution in Europe.

"In the year 1852, whilst on temporary leave in England, for the recovery of his health, Dr. Morehead was commanded by the Honourable Court of Directors to embody the results of his extensive experience in a medical work upon the diseases of Tropical countries.

"The result has been the production of a system of medicine which, whilst it raises Dr. Morehead to the highest rank as a Pathologist and Physician, reflects honour upon the body of which he is a member, and is a lasting monument to his zeal and ability.

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"Nor have Dr. Morehead's talent and devotion to his duties been less conspicuous in an administrative capacity, As the Superintending Surgeon of the Poonah Division of the Army during the memorable years 1857 and 1858, he gained the highest commendation for the foresight, the judgment, and the inventive readiness with which he provided for every emergency, and for the practical sagacity which he brought to bear on every circumstance affecting the health of the troops in his division.

"As the highest authority on the principles and practice of medicine in Western India, Dr. Morehead has long been acknowledged by his brother officers, and he presents a remarkable instance of the extent to which administrative powers of no mean order may be combined with the most profound practical acquaintance with every branch of his profession, and I consider him to be the most meritorious officer in the department under my control, and highly worthy of the honour now proffered by Her Majesty to the Indian medical service."

In 1860, Dr. Morehead was elected a Fellow of the Royal College of Physicians; and, in 1881, a further honour was conferred on him by Government, when, in company with three other Indian medical officers, he was made a Companion of the Order of the Indian Empire, on which occasion there was a neat stanza in the number of *Punch* for July 16, 1881, paying a tribute of praise to the quartet of Indian doctors:

The Indian Empire Order may right well the guerdon be, Of gallant men who worked full hard beyond the Eastern sea; And doctors do stern duty there, a thousand dangers sharing, So here 's a health to Morehead, Chevers, Barnett, and to Waring.

In replying to a friend's congratulations on this event. Dr. Morehead says, with reference to the ceremony of

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investiture: "The day at Windsor was very hot and the fatigue considerable. I had never been in the Castle before, and was much struck with its stately palatial aspect. The ceremonial was kindly and considerate without being imposing. I saw my old Poona friend, Sir William Muir-very kindly in many ways-in his office. In regard to the honour itself: as I considered myself to have passed into the fossiliferous strata, it is flattering to find oneself still regarded as one of the existing species, and I fancy that this is somewhat the feeling of Chevers and Waring; but less, as they were less fossilized. The manner of it is, as I think I gathered, something of this-Changes have taken place, and others in prospect, affecting in some respects the old service, which had complained of want of share in honours, &c. This kind of thing, you know, I never took any personal interest in, mistakenly I now think. The number of candidates for the service was on the decrease; hence the necessity of something, met by great improvement in the retiring pensions, and this act in respect to self, Chevers and Waring as representing the three Presidencies. It is a good beginning, and will, I doubt not, have a good effect on the service."

Among Dr. Morehead's many letters of congratulation on this occasion, was one from Dr. Alexander Grant, saying: "I have been very glad to see your name in a recent Gazette, but, as in the case of my venerable friend Forsyth, it is a very tardy acknowledgment of the services of one who so long stood at the head of the medical literature and medical education in India. That distinction can scarcely be added to by this decoration: however, it is welcome to you, I hope, and I beg to offer to you my very cordial congratulations. I have always thought that the founders of the medical schools of India

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were truly epoch-working men for the civilization of Asia. No act of British administration has been so successful or will be more enduring." After speaking of other friends, Dr. Grant proceeds : "Fayrer has just sent me for perusal a letter from our friend, Mouat,* who thus speaks of you: 'I was glad to see two names this morning whom I have always considered as ornaments to our service and an honour to our profession, Morehead and Chevers. The recognition they have received is far below their deserts, yet must be welcome as an indication that the fountain of Honour has discovered them.'"

Nor did his old friends and pupils in India neglect this opportunity of sending Dr. Morehead a congratulatory address, though it was now more than twenty years since he had last seen them.

"We, the President and members of the Grant College Medical Society, graduates of the Grant Medical College, and of the University of Bombay, desire to offer you our sincere and hearty congratulation on the honour which Her Imperial Majesty, the Queen-Empress, has been pleased to bestow on you, in enrolling you among the members of the Order of the Indian Empire. It is now more than half a century since you first landed in India, and twenty-two years have passed since you left us to enjoy well-earned repose in your native country. The long and eminent services rendered by you to the people of India and to the cause of humanity, have not, we can assure you, been forgotten by the inhabitants of this city and of this country; and we rejoice that these services have at length been acknowledged and stamped with

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^{*} Late Professor in the Calcutta College, and Inspector-General of Prisons, and Deputy Inspector-General of Hospitals; now one of the Local Government Inspectors.

public recognition. The active interest with which you still watch, from your retirement, the proceedings of our body and the progress in the Grant Medical College, of which you were respectively the founder and the first Principal, and your constant exertions to promote their usefulness, are highly appreciated by us, and will long entitle you to our gratitude and admiration. As your old pupils, friends and admirers, we desire to place on record our satisfaction at the honour conferred upon you by Her Imperial Majesty. That you may long be spared to wear the decoration, is our earnest wish."

To this Dr. Morehead replied :

"DEAR FRIENDS,—Your cordial and affectionate congratulations on my being appointed a Companion of the Order of the Indian Empire are very grateful to me. On leaving India in 1854 and 1859, I was honoured with similar and other tokens of approbation and esteem, but those were naturally inspired by the generous impulses of youth and the severance of a union of warm regard which had subsisted for a series of years.

"Now, however, after two and twenty years having elapsed, to be assured that these feelings still survive, unchilled by distance or by time, undisturbed by the battle of life or the attractions of worldly success, is a gratification which I am unable fitly to express; but I can truly affirm that the old times, with their emotions and associations, are at this moment not less warmly cherished than when, thirty-five years ago, we first met in the lecture-room of Grant College, and watched together at the bedside of the sick in the wards of Jamsetjee Hospital. Your address has recalled to my mind the best and happiest memories of the past.

"It was to clear the way and be the example to a native profession of medicine in Western India that the Medical

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and Physical Society was formed; but alas! after forty years of memorable service, it has passed from among you, leaving, however, Grant College and a valuable series of published transactions, the records of its history. Thus, on the society which you so worthily represent, now entering on the fourth decade of its useful labours, has devolved the lofty mission of maintaining, in the sight of your people, the noble profession of medicine, honourable and pure in all its moral, social, and scientific relations. It is, therefore, to me a constant delight to regard your present thrice-elected President, and others of the loyal band which first listened to my voice, guiding your counsels, encouraging your efforts, increasing your stores of knowledge, and pointing you onward to the goal of honour which is the sure reward of all who work honestly, patiently, and well.

"I thank you most sincerely for this tribute of kind sympathy and remembrance, which I shall ever prize with pleasure and with pride."

And certainly Dr. Morehead was wont to look back to the memories of his Indian career with pleasure, if not with pride; and to his former colleagues he always felt himself under the strongest obligations, and took a most sympathetic interest in their after-life and occupations.

Upon hearing that one of the early Professors of Grant College, who had retired from the service and been living in England, was attacked with paralysis, Dr. Morehead wrote in August 1881 to a mutual friend:

"I thank you very much for your account of Peele. Pray say to him, with my kindest regards, how much concerned I have been at his illness, and how glad I am to have tidings of his improvement. The memories and associations of our prime are the most enduring and most pleasing in their retrospect, when, as in his case, they are unshadowed by a cloud of any kind."

In writing to another later colleague, who was Honorary Physician and Secretary to a Cottage Hospital, he said, in April 1877:

"I am much obliged by your interesting Report of your Cottage Hospital.* The subject, in several of its aspects, was, in a measure, new to me, and you show so well the great benefits that result to the sick, to the community, and to the profession from the system, and also the success that the energy and management of a few right-minded, intelligent men may bring about. Your pamphlet must do good, I think."

In a notice of Dr. Morehead, after his death, the editor of the *Edinburgh Medical Journal* wrote of him:— "Though he rather shunned medical gatherings, those of us privileged to know him soon discovered what a store of medical wisdom and knowledge he possessed, and how fully he kept up, not only his information, but his interest in all professional progress."

After his retirement in 1869, Dr. Morehead lived, for the most part, in Edinburgh, and spent much of his time, thoughts, and energies as a well-wisher and an amateur critic of various local institutions, and as a disputant in many of the vexed medical questions of the day. The zealous interest which he showed in the administration and reform of Grant College has already been described. Somewhat of the same spirit of earnest conviction characterized his advocacy of other practical questions. For instance, in the years 1868 to 1870, an animated discussion being carried on in Edinburgh as to the site

^{*} A Review of the Working of the Bourton-on-the-Water Village Hospital from its Commencement in 1861 to 1877. By W. C. Coles, M.D.

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and mode of construction of the new Royal Infirmary, Dr. Morehead, as soon as he had carefully formed his own opinions on the subject, sought to enforce his views by writing a series of letters to the Edinburgh papers, which were marked by his usual unbiassed, and, one may say, philosophical method of treatment. He also drew up a note on the plans of the new Hospital Buildings in 1870, which was given in to one of the managers, its chief object being to induce the architect to dispense with "ornamental projections, turrets, and chimney-gables, which interfered with ventilation, sunlight, and cleanliness, and added to the cost of construction." Dr. Morehead's own views on the matter are expressed in a letter to a friend at this time (1880) :

"I have no enthusiasm in it. They are too fast for me. There is much outlay on what is not bread, which ought not to be the case with a charity of this kind. In a hospital connected with a medical school, there are two contending interests—that of the patients, and that of the students. The difficulty is to touch the true balance. Here, I think, it tends to incline too much to the side of the students: a system of medical education which does not, at all points, keep before the mind of the student, as a leading star, the paramount interests of the sick, is defective in principle."

It would, perhaps, be tedious to describe other letters and notes written by Dr. Morehead, on various subjects, such as on the controversy whether oral or finger-sign speaking were the best system of communication for deaf-mutes, Dr. Morehead being strongly in favour of the latter method, and on other minor topics.* But the most

^{*} One of these was a sketch of Medical Progress in India, which was included by Dr. W. W. Hunter in his account of the *Moral*

noteworthy of his papers were concerned with questions of medical science and sanitation. On the subject of the prevention and treatment of Cholera, he engaged in a controversy, in 1866, with Dr. Parkes, especially attacking the General Order of Sir Hugh Rose, then Commanderin-Chief; not but that he thought it often a very necessary and judicious measure to move troops attacked by cholera at once, and put them under canvas, but because he strongly objected to having such a definite command laid down in a General Order, without leaving any discretion to the medical authorities on the spot, a condition of things which he considered derogatory to the profession, an impediment to scientific inquiry, and liable to lead, under unfavourable circumstances, such as of bad

and Material Progress of our Indian Empire, and may be quoted here :--

"At an early period of the British intercourse with India, the climatic conditions of health necessarily commanded attention, indicated (1) by the separate treatises of a series of medical observers, starting from the latter part of the eighteenth century and continuing up to the present time: (2) by the Reports of the Medical Boards of Bengal, Madras, and Bombay, of the great outbreak of cholera in 1817; the Medico-topographical Reports of 1825-40 of the chief stations of the Madras Presidency by the Medical Board of the Presidency: (3) by the transactions of the Medical and Physical Society of Calcutta (1823-39), and of Bombay (1837-76); Indian Annals of Medical Sciences (Calcutta). from 1855 onwards; and by other medical journals in those Presidencies through different periods: (4) by the Medical Education of the natives of India, commencing with the Vernacular Medical Schools in Calcutta and Bombay, between 1820 and 1830, developing between 1835 and 1850 into the Medical Colleges of Bengal, Madras, and Bombay, and in later years extending into Medical Schools at Hyderabad (Deccan), Nagpore, Agra, Lahore, Balrampur (Oude), Patna, Dacca, Poona, Ahmedabad: (5) by vital statistics, which from 1827 take a marked place in the medical literature relative to India, and has become, since the appointment of Sanitary Commissioners in 1863, its characteristic and leading feature."

weather, to far greater mortality than would otherwise have been occasioned.

Another Indian medical question which interested Dr. Morehead in 1870 and 1871, was that of stationing European troops at Hill Sanataria * during the hot season of the year. And he was one of the most ardent advocates of the system, since adopted, of stationing our troops in the hills during the hot season, and forming camps of exercise for them in the plains during the cold months.

Other medical papers written by Dr. Morehead, after his retirement, discussed the pathology of various diseases, such as enteric fever,[†] pneumonia, and hepatitis. And at the request of the Epidemiological Society, to which he was, for many years, Secretary for the East Indies, he drew up a table of diseases, accompanied with a note on nosological arrangement.

A number of memorial notices of friends or former colleagues constituted another class of writings from Dr. Morehead's pen. From a sense of public duty, as well as of personal affection, he was always ready to pay the tribute of a biographical notice to any friend who, in his opinion, had lived a good and useful life. And it was in a like spirit of filial duty that, towards the end of his life, he published the memorials of his father Dr. Robert Morehead,[‡] who had died in December 1842, at Easington

^{*} Cf. Articles by Dr. Morehead in *The Transactions of the Bombay Medical and Physical Society*, vol. iv. p. 193 and p. 208; and vol. vii. p. vii.

[†] A note by Dr. Morehead on this subject, with an introduction by Dr. Chevers, is reprinted from *The Medical Times and Gazette* of 13th January 1883, at the end of this Memoir, as Appendix III.

[‡] Memorials of the Life and Writings of the Rev. Robert Morehead, D.D. Edmonston & Douglas. 1875. Octavo.

in Yorkshire, the parish of which he had been rector for ten years. Of his "aim" in writing this book, he speaks in a letter to Dr. Coles (7th January 1876):

"It originated in a wish to preserve some of the sonnets in print for private use. This led me to look into the letters and journals, of the existence of which I only had been aware within the last three or four years. This, with several other incidental circumstances, led me on. It was a risky proceeding; but I have had no reason to regret it. It has interested many people, and, I hope, done harm to none. There are, as you can conceive, interests more especially Scottish; but it is pleasing to find that it is not altogether unacceptable where these interests cannot exist. I think you see that the book requires more than a cursory reading."

The Edinburgh Daily Review thus described the book: "This volume of combined autobiography, biography, and works in verse and prose, is edited by a son who passed through a most successful and honourable career in the Bombay Medical Service. The work is well done-with taste, with reticence, yet with sufficient fulness, so that it is indispensable to all who are interested in Scottish society and literature at the end of the last and the beginning of the present century. Dr. Morehead's eldest son was a Madras civilian, who so distinguished himself by showing the milder virtues of his father in the work of administration, that he rose to be Acting-Governor of the Province, which he left amid the regrets of all classes. Not only as the father, but as the friend of distinguished Anglo-Indians, there are, hence, not a few references to the great men of that class who have passed away, but who, while they lived, reflected a lustre on their native country. Thus, Mountstuart Elphinstone, 'who twice refused a crown,' to wit, the position of Governor-General,
was an intimate friend of the subject of this volume, and we thank the editor for his contributions of letters to the life of that great and good statesman, which has yet to be written."

On the same subject is the next letter, from Dr. John Brown, the author of *Rab and His Friends*, and a wellknown literary man in Edinburgh:

"MY DEAR PRINCIPAL, DOCTOR, AND FRIEND,

"I got from H--- his copy of the Memorials last night, and was delighting myself with them, when your kind note and gift came. It is a delighful book ; such a record of worth and lovableness is rare enough, and, as far as I have gone, it is put together by a filius haud degener. But I have only tasted it as yet. That on Dante is most excellent; Jeffery's letters delightful; such a persistent, unbroken love and friendship it is good to see. You may be sure I found out my 'bag o' the bee,'* and read it and fed on it with equal shame and satisfaction, quite aware that I had no right to it, but swallowing it and relishing it all the same. It is good for us all, especially for the young, to know something more of that great old time, when men were men and principles were principles. Thanks again, and tell Miss Morehead that she must try and like her father still a little more than ever, for this good and modest work of his. . . ."

In a letter to his sister, Dr. Morehead again described his object in editing the Memorials of his father: "As regards these Memorials, there has not been time for any one to read them since they were published. I have explained to you my action in the matter. Some select a

* A Reference to a passage in p. 406 of the *Memorials*, where Dr. Brown is alluded to with words of praise.

bust, others a picture, &c., to commemorate those whom they love. I have chosen this form as most likely to be useful and acceptable to our father's descendants, and it will be enough for me to feel that I have not altogether failed in the execution."

The present memoir of the son has originated in a somewhat similar desire of his daughter, Miss Morehead, to pay honour to her father and to perpetuate the memory of one who lived for a noble aim, and mainly succeeded in his life's work; while the impersonal quality, if it may be so called, which this memoir has assumed, springs from a double cause,-first, that in his public dealings the life of the first Principal of Grant College was unmarked by unusual incidents; and secondly, because, Dr. Morehead having been peculiarly reserved and impatient of inquisitiveness, while accustomed to speak little of himself, it would ill become a writer having a real respect to his memory to compile his memoirs in a manner which would have been distasteful to him. He would have acknowledged-none more so-the advisability of publishing any record which might add to the practical and useful experience of his successors in the field of medical education; but he was averse to the modern tone of many biographies, which deal too largely in gossip of various kinds. It may, therefore, suffice to point out the characteristics of Dr. Morehead in his intercourse with others. The energy, earnestness, and principle which gave its strength to his character, have already appeared in the earlier pages of this memoir; these were, however, combined with a conciliatory manner which would avoid opposition, so far as opposition could be avoided without surrender of principle. His opinions were always the result of careful and impartial consideration; they were marked by strong sense, a wise judgment

and discretion; while, in carrying out his opinions, or impressing them on others, he acted with steady patience and tact and courtesy. And, in truth, this tact and courtesy arose out of a genial appreciation of character and a real sympathy and kindness of heart towards those with whom he came into intercourse. But with all this kindness and sympathy, and notwithstanding a vein of Scotch humour,* which added a further pleasure to his society, perhaps the most striking characteristic of Dr. Morehead was his reserve. He always bore himself with a stately dignity which almost forbad familiarity even on the part of those with whom he was most intimate. This reserve was combined, too, with a certain imperiousness of thought and manner, which displayed itself especially when what he considered the fundamental principles of any right course of action seemed to him to have been disregarded or denied.

This reserve of Dr. Morehead is well exemplified in his diary, which he kept for several years, which contains scarcely any reference to his emotions or feelings on any occasion, but which consists chiefly of professional experiences, and criticisms called for by any event which had occurred, or by any institution he had inspected.

Dr. Morehead's general appearance was striking. One who knew him in 1845, speaks of "his tall erect figure, upright carriage, snow-white hair—which it was when I first saw him—strong and luxuriant, and not the white hair of old people, as he was under 40 at the time." It may also be remarked that his eyes, beneath their straight eyebrows, had ever a keen and penetrating look, often touched with the gleam of humour, while the deter-

^{*} A friend, in acknowledging the receipt of a photograph of Dr. Morehead, writes to Miss Morehead: "I can see in it the well-known expression of suppressed fun as strong as ever."

mination of his character was well denoted by the firmset mouth and well-shapen chin, features which were, however, in later life concealed by his white moustache and long patriarchal beard.

In 1844, Dr. Morehead had married Harriet Anne, daughter of the Ven. George Barnes, D.D., the founder of the Bombay Education Society, first Archdeacon of Bombay, and, after his return from India, Archdeacon of Barnstaple, Devon. To Dr. Morehead's very great sorrow, his wife died two years after their marriage, leaving him with two children, the elder a son and the younger a daughter, at whose desire the present memoir has been compiled. The son, Charles Rivett Morehead, was struck down by fever in the early promise of boyhood, and died at Scarborough on the 15th October 1852. He was buried close to his grandfather's and grandmother's graves, at Easington, where Dr. Morehead's brother, the Rev. George Jeffrey Morehead, was rector in succession to their father. The following entry occurs in Dr. Morehead's diary respecting the funeral. "On Wednesday, the 18th, dear Charlie's funeral took place. It was a rainy and boisterous day. The rain ceased as we approached Easington, but the wind blew high and keen. As we passed round the Rectory grounds and the Church-gate, we were joined by George, his wife, and a few of his friends, and we passed from the carriage, following the coffin into the church, and I found myself, for the first time, under the tablet to my father's memory; and then to the churchyard, close to my father's and mother's graves, and there the dear boy was placed."

In 1863, Dr. Morehead's elder brother, William Ambrose, died soon after his retirement from the Madras Civil Service; and seventeen years later, in September 1880, another of his brothers, the Rev. George Jeffrev Morehead, died, and was buried at Easington, where he had been rector, in succession to his father, for forty years. On this occasion Dr. Morehead thus wrote to a friend who was not personally known to his brother :

"The melancholy intelligence of my dear brother's death came unexpectedly upon me, for I had hoped and believed that he was in a fair way of recovery, but a change took place in his state, and his most useful life came to a close. Two months ago, he was in full work. Always four services, and sometimes five, every Sunday, with a distance of four miles between his churches, and an earnest devotion to his parish work, and to his duties as a magistrate, a combination not now often made; but in the former days 'Cleveland' was an outlying corner of Yorkshire, and it was difficult to find able and conscientious men for the magisterial work. Often have I advised him of his numerous services, but his answer always was that he performed the last with more ease than the first. The funeral took place at Easington. You can well conceive that forty years of a life like this, combined as it was with the most genial manners, and a fine manly bearing, filled the church and churchyard with a crowd of mourners, men and women. It was a most impressive scene."

The library which had belonged to the father, the Rev. Dr. Robert Morehead, was dispersed, chiefly among the members of the family, after the death of his son and successor in the parish of Easington. This breaking up of the family library is referred to in the next extract from a letter to his sister, Lady Lowther.

"I am delighted that you wish to appropriate the *Edin*burgh Review; it includes the whole period of Jeffrey's editorship, and represents the first great epoch of the Review, and is, therefore, complete from that point of view, and full of associations for you. I had thought of the Wilton shelves, as its most desirable resting-place, but feared it might operate as a bag of dynamite on its Conservative brethren;* as it is, I regard it merely as a wholesome leaven, and a pleasant flavour for the doctrines that will surround it."

In August 1881 his sister, Matilda Lockhart Morehead, to whom he had been greatly attached, died. Her character was well described by him in a letter to a friend, who had condoled with the family at her death.

"Your very kind letter, and Mrs. C——'s tender sympathy, have been much appreciated by us. I do not know that I have ever before experienced so just and true a recognition of my dear sister's high and peculiar qualities, as the impression they seem to have left after so short an acquaintance with Mrs. C——. Her sympathies so warm, so universal, so frank and unreserved, and so practical at the same time, and with a cheerfulness and ready wit that never failed, even at times of suffering which had much clouded and chequered her life. And all this was rooted in, and sprang from, the most simple and unbourded Christian faith. A tree thus known by its fruits "

The close of Dr. Morehead's life is thus described by one who was constantly with him.

"After the death of his brother George, and of his sister—the sorrow having been borne with his usual fortitude—those who watched Dr. Morehead closely, could not but notice a certain failure in bodily strength, though his mental faculties remained unimpaired; and this was

^{*} In allusion to the political doctrines of the Rt. Hon. James Lowther, late Chief Secretary for Ireland under Lord Beaconsfield's Government, to whose mother, Dr. Morehead's eldest sister, the letter is addressed.

not unremarked by himself, but was quietly accepted as the natural consequence of advancing age. In the spring of 1882, he paid visits amongst various relatives and friends in the south of England, many of whom were struck by his calm and gentle bearing, and who felt that they might, perhaps, be seeing him for the last time. During the early summer he quietly remained, for the most part, in his own home in Edinburgh, and on the 22nd of August he went, with his daughter, to visit Sir Charles and Lady Lowther, at Wilton Castle, Redcar, Yorkshire, when he expressed the greatest pleasure at seeing his sister again, and enjoyed with her the sight of many of his father's books, which had been carefully arranged on the shelves of the library. About this time, and on the day after his arrival at Wilton, he seemed to look better and stronger than he had done of late, but on the morning of the 24th, shortly after breakfast, at which time he had seemed to be well and cheerful, the end came very suddenly, from an attack of syncope, and thus a noble spirit was gently released, without apparent pain or suffering. To those who loved him best the old, familiar words came back with peculiar strength and comfort: 'He was not, for God took him.'

"A few days later the earthly remains were laid in the beautiful Dean Cemetery of Edinburgh, very near to the grave of his brother William, to whom during life he had been closely united by strong ties of sympathy and affection."

Various short notices of his life appeared in the local and medical journals and in the Indian papers, and one was issued by the Royal Society of Edinburgh of which Dr. Morehead had been a Fellow since 1860. All alike testified to his very great worth. But, passing over these, it will be enough to quote two letters concerning him,

WRITINGS AND LATER LIFE.

written by Mr. Claude Erskine, late of the Bombay Civil Service, and formerly Director of Public Instruction in Bombay; and by Sir Joseph Fayrer, K.C.S.I., F.R.C.P., Physician to the Queen, the Prince of Wales, and the Secretary of State for India in Council, and President of the Medical Board at the India Office.

The former, writing to Miss Morehead, having mentioned that he had read with great interest the "In Memoriam" notice of Dr. Morehead, reprinted from the *Edinburgh Medical Journal* for October 1882, says:

"It must be a comfort to you, in your sorrow, to know that those who knew him best were those who valued him The notice is written with much feeling, and most. seems rightly to dwell on some of those traits of character which you would wish to keep alive in the memories of all who knew him; his active kindness, his devotion to a noble profession, his quiet wisdom, and real goodness. The assurance thus given that his love of truth and duty, and his power of kindling it in younger men, were known to and felt by those about him, must be some comfort to you now. And yet it must also make his loss doubly hard to you who were so much to him, and to whom he was so much. I had known your father for very many years, and always felt and shall feel a true respect and regard for him, and his character, and work in life. When I met him in London this summer, he seemed to be looking uncommonly well, and the sudden tidings of his passing away came upon us like a shock, in spite of his fulness of years."

The following are Sir Joseph Fayrer's words :

"Dr. Grant has told me that you would like me to record my opinion of the estimation in which your lamented father was held by his brother medical officers in India. I think I do not err in saying that no medical

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officer ever stood higher in their estimation, none who was more respected, or whose opinions were more highly valued.

"For my own part I can say that, having known him by his writings for many years, I considered it one of the happiest events of my life when I made his personal acquaintance, and realised the extraordinary powers and goodness of the author, with whom I had hitherto been acquainted only by his books. He was a great Physician in the best and highest sense of the term, a great benefactor to medicine and of the people of India; and one of whom we are all justly proud. His death, though it occurred in the fulness of time and not before he had contributed invaluable material to our stock of Indian medical learning and experience, is an irreparable loss. and one that is deplored alike in India and at home. The only consolation, and it is a great one to those who loved and valued him, and also sympathise with you in your great bereavement, is, that, as he lived an honoured and useful life and left his ripe knowledge and experience for our benefit, so he died full of years and wisdom and the affection of troops of friends, and, we may hope, in the assurance of an enduring reward in the higher and better life, for which his own here was such a fitting preparation. He will long be held in loving memory by many friends."

On the news of Dr. Morehead's death being brought to Bombay, the Grant College Medical Society at its next meeting passed two resolutions to the effect (1) "That this society deeply deplores the death of Dr. Charles Morehead, and puts on record its sense of lasting gratitude to him who was at once its father, guide, and warm supporter up to the time of his death"; and (2) "That the graduates of Grant Medical College, Licentiates of Medicine of the University of Bombay, friends and admirers of Dr. C. Morehead, be invited to raise subscriptions to perpetuate his memory in connection with the Grant Medical College in some suitable shape to be afterwards agreed upon by a Committee."

The amount raised accordingly by Dr. Morehead's friends both in England and India was Rs. 5,000; and, since his memory was already commemorated in Grant Medical College by his bust, which had been placed in its vestibule by the subscriptions of friends on his final departure from India, the whole of the Rs. 5,000 invested in 4 per cent. Government paper was offered to, and accepted by, the Bombay University for the purpose of endowing a Scholarship, to be awarded annually to the graduate in medicine of Grant Medical College who showed the highest proficiency in clinical medicine, the Scholarship being entitled, "The Charles Morehead Scholarship in Clinical Medicine." The first twelve winners of this prize will also each receive a handsomely bound copy of Dr. Morehead's book of Clinical Researches, with a portrait of him at the beginning, which have been presented by Miss Morehead.

And thus Dr. Morehead's name will always be cherished in the Medical College which he himself inaugurated, and specially remembered in connection with that branch of medical science of which he was the most approved master. His high standard of duty and devotion to his profession is still remembered as a tradition of that institution, and his example remains as a motive among its students to an earnest life. It has justly been said of him that in the long list of those who, in India, have done honour to the medical profession, and of whom that profession may be justly proud, there are few names more deserving of fame than that of Charles Morehead.

APPENDIX I.

EXTRACT from SECOND REPORT of the BOARD of EDUCA-TION, of which Dr. Morehead was Secretary.

THE tendency of our proceedings in regard to Vernacular Education, has evinced our conviction that the primary instruction of the people should be conducted exclusively in the vernacular language of the respective provinces; and that it is essential to permanent and real success, that the exertions of Government should be responded to by that degree of co-operation on the part of the people, which will suffice to give evidence of a sincere desire on their part to avail themselves of the benefits of education. It is with this latter view that we have attached so much importance to the constitution of local school committees. consisting of representatives of the different classes of the community, and that we have insisted so rigidly on the provision, by the people, of school-houses, and on the payment of a fee by the pupils. Whereas on the part of the controlling authority we trust that we have shown our sense of the importance of practically demonstrating the advantages of education by advancing the educated; of exercising a vigilant system of superintendency over the schools; of providing well-trained masters, and of preparing a series of vernacular school-books, calculated

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to impart a degree of moral and intellectual training to the body of the people, and to lay the foundation of a vernacular literature to be made, we would hope, ultimately available for the improvement of the adult population, by means of village libraries in connection with the schools, and their committees. It is in relation to this latter object (the preparation of a series of vernacular school-books, and ultimately of an improved vernacular literature) that we view with so much satisfaction the practical direction which has been given to the course of study, in the Sanskrit College, to the training of young men as Sanskrit, English, and vernacular scholars, the instruments by whom this vernacular literature will be created.

The measures resolved on, or proposed, in regard to the English schools, show that we are of opinion that the course of instruction pursued in them should be suitable for the preparatory education of those members of the community who have higher objects in view than a course of primary instruction is calculated to provide for; who aim at qualifying themselves for the higher offices connected with the State, for different professions, as merchants, teachers, civil engineers, physicians, lawyers, &c. In fact, we consider that the English schools should represent the Secondary Schools of a system of national education, analogous in position to the gymnasia in Germany and Prussia, and the grammar schools in England. It is under this view of the object of these schools that we insist on a preliminary course of primary instruction in the vernacular schools as a condition of admission; that we enforce the payment of a higher fee; that we provide for the honorary admission of pupils distinguished in the vernacular schools, and of whose future career good may be anticipated; that we have been desirous to obtain masters of considerable acquirement and experience; and that we have traced the occupation in after life of the young men who have been educated in these schools.

If the course of instruction followed in the English

schools is intended to be preparatory as regards those students who aim at qualifying themselves to follow a special profession, it remains, to complete a system of national education, that there must be institutions in which these special professions are taught. In the scholarships and the upper division of the Elphinstone National Educational Institution, we have as yet in this Presidency but the nucleus of this highest department It is, however, our expectation to be of education. enabled before long to make a most important addition. by establishing a class for the practical and efficient training of surveyors and civil engineers; and thus afford the means of giving to the course of instruction that special direction for which the wants of the country at present. afford the freest scope.

APPENDIX II.

A MEMORANDUM ON GRANT MEDICAL COLLEGE, BOMBAY, by Dr. C. MOREHEAD, M.D., F.R.C.P., dated October 1870.

I LEARN, from the *Times of India* of the 9th September, that the following memorandum, which was submitted to the Secretary of State for India in February last, is under the consideration of the Department of Education of Bombay, and the subject of public discussion; but that its purport is very imperfectly and partially known.

As there need be no mystery respecting an important question of public instruction, I print the paper for the information of those who may be interested in the subject to which it relates. It was not my object to review the whole system of the Grant Medical College as now existing, but merely to point out what seemed to me the fatal tendency of some of its present principles and practices. It might have been useful to have extended the inquiry to such points as the increase and manner of selection of the professors, the methods of clinical instruction and of test examination, the decadence of the Medical and Physical Society, &c.; but I thought it wiser to confine myself to an immediate and pressing danger.

It might also have been well to show that medical

education in Great Britain is at present in an unsatisfactory and unsettled state; that its tendency to be too discursive and extended in its subjects, too didactic, too little practical, clinical, and demonstrative in its methods of teaching and examining, is being generally admitted; and that the removal of these defects is the basis on which suggestions for improvement mainly rest. When Grant Medical College was first organized, the defects in the system of medical education in this country were fully understood and purposely avoided; but of late years this fact would seem to have been lost sight of and imperfections to have crept in, which medical educationists are now endeavouring to correct in British schools. Thus the vantage ground of prevention, originally occupied by Grant College, has been, not wisely, abandoned. An inquiry into the entire subject of medical education in the presidency of Bombay would have further led me to point out that the proposal to remove the vernacular medical classes from Grant College to the large civil hospitals at Poona and Ahmedabad, must, in addition to the protection of Grant College, tend to a large development in the usefulness of these provincial hospitals, and to an influence for good, in many ways, on the population of the cities of Poona and Ahmedabad, with their important surrounding districts.

MEMORANDUM.

1. The Report of Grant Medical College, Bombay, for the year 1868-69, which appears in the *Times of India*, of the 7th of January, convinces me that the College is in jeopardy, and that I shall fail in my duty to the Government of India if I do not point out what seem to me to be the dangers.

2. For my title to state my opinions, I would refer to the Reports of the College from its origin in 1845 to 1862, which include the period during which I was Principal, and the two years which succeeded my retirement from the office. 3. To prevent needless repetition, I would request attention to the short section* on "Medical Education," which will be found in my sketch of Sanitary Progress in the Presidency of Bombay from 1830 to 1860, at p. 148 of the Sanitary Report issued by the India Office in July 1869, as necessary to the full understanding of the following observations.

3. The object of the College was to create a class of scientifically educated native medical practitioners, to take the place of the uneducated practitioners, who were an evil, not a benefit, to the country. To effect this, three conditions were insisted on : (1) A preliminary education sufficient to fit the mind for the apprehension of the medical sciences; (2) Instruction through a language (English) possessed of a past and progressing medical literature; (3) Adequate clinical instruction, and clinical test examination.

5. By the dogma, that in order to the efficiency of a medical school there should be a relation between the number of the students and the size of the affiliated hospital, is meant that every student should, for sufficient periods, be engaged in discharging the duties of clinical clerk and surgical dresser, under the immediate direction of the Professors of clinical medicine and clinical surgery.

It is very true that in the large medical schools of Europe this is impracticable, and, in consequence, these schools are very generally defective as regards this indubitably fundamental principle of medical education. It would be interesting to take the last thirty or forty years of medical education in Great Britain, and to inquire whether or not the medical men who have risen to reputation in that period, have not almost invariably been of the class of house-physicians and surgeons, clinical clerks and surgical dressers. No doubt many good practitioners have not had these advantages; but in a country

^{*} Reprinted by Dr. Morehead in an Appendix to this Memorandum, but omitted in this Memoir.

like this, with a largely-stocked medical profession, public services, numerous hospitals, and other institutions relating to health, the friction of rivalry and the dictates of conscience prompt to an after-course of self-education, by which the defects of collegiate training are in part corrected. But these conditions of after self-education do not exist, nor are they likely to exist for a century or more, in India; hence the necessity for the rigid observance of the principle in question in medical education in India; and hence the further corollary, that those who are engaged in conducting medical education in India commit a grave error if they accept without reserve, as models, the existing systems of medical education in Europe.

6. From 1835 to 1860, the progress of education in the higher English schools in the Bombay Presidency fell far short of the expectations which were justly founded by Sir Robert Grant on the data before him when he wrote his minute of 1838; hence the College laboured under the disadvantage of an insufficient supply of adequately trained students. The remedy for this evil lay in the improvement of the secondary schools, not in restless attempts to forego the fundamental principles of medical education.

7. The Medical College, as conceived by Sir Robert Grant, and conducted from 1845 to 1851, was especially a department of public instruction, subject to the Board of Education; but now, the Government, not being able to apprehend the principles of medical education, or to realise that the progress must be slow, and that three or four truly qualified practitioners annually were a sure good, but that ten or twenty imperfectly educated were a certain evil and a lapsing back in the direction of the state of matters which the College had been instituted to correct, began to have misgivings about the expense and the small number of students; hence, in 1851, the advanced apprentices of the subordinate European medical establishment were sent to Grant College for a short curriculum of study. This was done without dis-

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advantage to the original object of the Institution. They were English-speaking youths, competent to follow the lectures, they had already had some hospital training; their number, and the number of the regular students, were such that there was no interference with the clinical studies of the latter. Carefully watched, it was of great service to the European branch of the Medical Department, and did not injure the College; but it established a distinct connection between the College and the Medical Department, and consequently introduced the germ of possible discord between them.

8. In 1860, probably owing to the transition state of the Department of Public Instruction, and the larger demands of an increasing civilization for an educated agency, the number of the regular students declined, and now a vernacular class of pupils was added to the College, thereby establishing another connection between the College and the Medical Department, and introducing a further germ of possible discord, and this at a time when the connection with the Department of Public Instruction had dwindled to very small proportions from the great decrease in the number of regular students. The objects of the vernacular class were two: 1st. To improve the efficiency of the Native Branch of a Subordinate Medical Establishment. 2nd. To provide a class of independent practitioners for the smaller Mofussil towns. The first object is a legitimate and useful one; but it should have been carried out independently of Grant Medical College. The large Civil Hospital at Poona, is the proper place for the Marathee class, and the large Civil Hospital at Ahmedabad for the Guzerathee class, and both in connection with the Medical Department, not that of Public Instruction. A scheme of this kind was suggested by me to the head of the Medical Department in 1858, when I officiated as Superintending, Surgeon of the Poona Division; but the time was unsuitable for pressing the measure.

9. The vernacular classes, innocuous, perhaps, to Grant College, when the total number of all classes was small, carried with them, in their increase, the sure conditions of the destruction of the College as a branch of national education, because they must disturb the efficiency of the clinical department. This is no theory; for it is what I witnessed in the Bengal College in 1853, when the vernacular students performed the hospital work, and the regular students "walked" the wards. To anyone conversant with the details of clinical instruction, this must appear the inevitable consequence of large numbers of different classes, with different interests, utilizing a fixed and limited means of instruction.

As regards the second object of the vernacular classes, viz. the providing a class of independent private practitioners for the smaller Mofussil towns, I would only remark that if there be any truth in the principles set forth in the previous paragraphs of this Memorandum, the idea of communicating a knowledge of the science and practice of medicine sufficient for safe independent practice, in a short curriculum, to minds with only a preliminary vernacular training, and of considering that a class of men ignorant of languages with a past and progressing medical literature, can constitute an educated profession of medicine, is to my mind a delusion, and diametrically opposed to the principles in accordance with which Grant Medical College was established and conducted for fifteen years and more.

10. It is very evident, from the last Report of the College, that the subsidiary purposes of the College, viz. the vernacular and apprentice classes, are seriously encroaching on, if not absolutely usurping, the place of the chief and original purpose, and it is, therefore, no wonder that the Medical Department has contended with the Education Department for supremacy in controlling the Institution.

11. The time has now come for the India Office to interfere, and to reduce the tangled state into which the College is fast passing, into something of order and consistency. Nor will it be difficult to achieve this. The present number of regular students, or undergraduate

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class, as it is now termed, is sixty-six, sufficient to reestablish firmly the College as a branch of national education. The European apprentice class is fifty-five. These may be left as heretofore, caution being given that this class is not to be permitted to disturb the clinical system of the undergraduate class; and caution being further given that in respect to the class of undergraduates, preliminary fitness, and number in relation to the clinical means of the hospital, not absolute numbers. are the most important conditions, and the vouchers of a trustworthy success. The Marathee (vernacular) class, forty-six in number, for the improvement of the Subordinate Medical Department, with its teachers, to be transferred to the Hospital (Sasoon) at Poona. The Guzerathee (vernacular) class, if required for the Subordinate Medical Department, to be opened in the Hospital at Ahmedabad.

12. It would be important also to inquire, as closely related to the status and character of an educated national profession of medicine, into the state of Grant College Medical Society.

13. I gather from the Report of 1868-69, and from rumours that have otherwise reached me, that there are other questions affecting the welfare of the College under discussion, and undetermined. It would seem that an assimilation to the College of Bengal, of some kind or other, is under contemplation. On this I would recommend that great caution be observed, for it is altogether reversing what was done subsequent to 1853; then the defects were with Bengal, Grant College being the model, both as regard its clinical methods and form of government.

14. We have seen that Grant College was placed under the control of the Board of Education, but it now remains to mention that Jamsetjee Jejeebhoy Hospital, the practical school of the College, and the extension of a former Native General Hospital, continued to receive its commissariat and medical supplies through the same channels as the other hospitals of the Presidency, and to be subject

to the general control of the head of the Medical Department. The Principal of the College was also the Head of the Hospital, and the two institutions worked in perfect harmony, without any attempt on the part of the Medical Department to interfere with the special relation of the Hospital to the Medical School. It is sought, I believe, now to place the Hospital under the control of the Educational Department, as well as the College. After ten years' absence from Bombay, I may not speak positively on this point; but, looking at the question from the standpoint of my former experience, I am unable to realise the necessity or expediency of the measure. I am aware that the Hospital of the Bengal College has always been separate from the Medical Department, but its origin was very different from that of Jamsetjee Hospital. When the Bengal College was established, it possessed no affiliated hospital. In time, it became evident that a practical school or hospital was necessary. A small one was formed, and placed under the authorities of the College; but though added to from time to time, it remained insufficient for the purposes of practical instruction till 1853. The present Hospital of the Bengal Medical College was opened during my visit to Calcutta in February 1853. There is, therefore, nothing in the origin or history of the Hospital of the Bengal College, to justify its being regarded as a model for Bombay, where the College and Hospital originated in their present proportions and relations, and worked in perfect harmony with all other departments, for fifteen years or more.

February, 1870.

APPENDIX III.

LETTER from DR. MOREHEAD to the Honourable H. P. ST. GEORGE TUCKER, Member of Council, Bombay, with Preface.

To the Editor of the

Times of India, Bombay.

SIR,—When, two mails past, the original of which the enclosed is a copy was forwarded to Bombay, I was unaware that Mr. Tucker's period in Council was so near its close. I am, therefore, uncertain whether the letter can have reached before his departure; at all events, it cannot have been received by him in time to admit of his giving heed to its contents. Under these circumstances, I am induced to request you to be kind enough to give it a place in your journal.

I cannot doubt that Mr. Tucker will concur with me in opinion, that the publication of reasonable comments on Medical Education in India is not to be deprecated, but rather much to be desired.

> I am, Sir, Your obedient Servant, C. MOREHEAD, M.D., Late Principal of Grant Medical College.

Edinburgh, 25th March 1874.

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Edinburgh, 11 North Manor Place, March 11, 1874.

MY DEAR MR. TUCKER,—I have followed with much interest the newspaper reports of Grant College for 1871, '72, and '73, and have read with much pleasure your last Address in January. I am sorry to observe that you are soon to leave India, for the College is in a position in which the results of your careful study of its wants and interests would be of great advantage to its future, and I earnestly hope that before you leave, you may be able to put the house in order, or in train of being so.

I should like, therefore, to tell you how the matter strikes me at present, and I am sure you will excuse the abruptness of my jottings. Refer to the introduction to the first Report of the College, and you will find a Resolution (No. v.) which states that the fund subscribed by the admirers of Sir Robert Grant would be made over to the Government, "on condition that the Medical College, so ably planned and so zealously advocated by Sir Robert Grant be established and bear his name." The copy of Sir Robert's minute of March 1838, which I possessed as Secretary of the Organizing Committees from 1838 to 1843, was bound and placed by me in the records or library of the College, and is, I presume, still there. This minute might even now be printed as of historical interest There were four fundamental and otherwise useful. principles in Sir Robert Grant's plan. (1) Education for independent medical practice, not of assistants in Government hospitals; (2) sufficient preliminary training; (3) instruction through the English language; (4) education thoroughly practical. Therefore, the additions of classes of European hospital apprentices and vernacular classes, were steps at variance with the pledge given by Government to the public; and when the numbers in these classes so increase and encroach on the practical teaching means of the College as to render impracticable the carrying out Sir Robert Grant's plan in its integrity and reality, I do not see that the Government can, in good faith, do otherwise than remove elsewhere these

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additions, and then keep up the practical means, in proportion to the increasing number of regular students. Therefore, transfer the Marathee class, with its teaching staff, to the Sassoon Hospital at Poona, and call the school by the name of the native gentleman who has contributed most largely to it. Form the Guzerathee class in the same manner in the Hutteesing Hospital at Ahmedabad. Thus you will utilise and improve these hospitals, and familiarise the people of the interior with an improved medical system. The cost of teaching material need not be much—a room for practical anatomy, another for a simple teaching chemical laboratory, a lecture room, a collection of specimens of the materia medica, &c. The student of these vernacular schools should, on leaving, have sufficient knowledge of English to enable them to advance in medical knowledge, and not stop within the limited circle of their vernacular text-books. No student. after a three-years' curriculum, should be put in independent charge of a dispensary, or in any other position of independent practice, till he has gone through a probation of from two to five years in a hospital, under a competent medical officer, which is, in other words, to say till he has had sufficient clinical experience, and exhibited other qualities of fitness for responsible duties.

European student apprentices should be attached to the European hospitals at the Presidency, as their practical school, and attend the College classes so long as there is space in the class-rooms.

The present number of undergraduates, 113, is in excess of the practical means of the College—that is, if the practical methods formerly in use be really, not merely nominally, maintained.

The present practical means—the dissecting room, the chemical laboratory—are exactly what they were on the opening of the College in 1845. The only *real* addition to the clinical means, since I left in 1859, are fifty beds in Jamsetjee Jejeebhoy Hospital. On my return to India in August 1856, I laid before Government suggestions for increasing the accommodation of the College building,

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and for making the Hospital dead-house fitted for pathological teaching. Dr. Cook, I observe, dwells on this latter purpose in his Report for 1873. There should be no loss of time in making the additions and modifications necessary to increase the teaching accommodation, for the number of undergraduates is still likely to increase; and if it is allowed to go much beyond the practical means of instruction, lax methods, difficult to eradicate, will gain hold of the institution.

Now let us turn to the relations of Grant College to the University of Bombay. You will realise the fact that from 1850 to 1859 (I confine myself to what I personally know) the methods of Grant College were far in advance of other schools, and that the superiority was of the kind which the British Medical Council has been, for years past, in vain struggling to bring about in the United Kingdom. This vantage ground was occupied by Grant College when the University of Bombay became the examining body of the students of Grant College. The course of action ought to have been easy enough, viz. to leave the College on its vantage grounds as to methods of instruction and examination, by simply changing the title of certificate of fitness from "Diploma of Grant Medical College," to that of "Degree of Licentiate of Medicine of the University of Bombay," and by the Council of the University, instead of the Government, appointing the Board of Examiners. The session and terms and periods of examination had been fixed with great care, so that the courses of anatomy, chemistry, medicine, surgery, physiology, and materia medica should be complete and continuous; and above all, that there should be no interruption of the winter term, from the 1st November to the 15th March, either by holidays, examination, meetings, or any other kind of contrivance, because it was the season when the energies of teacher and student were at their best, and was the only period when practical anatomy could be studied with advantage and comfort.

The University, forgetting the great difference in the climate and social and educational circumstances of Lon-

don and Bombay, adopted the methods and periods of medical examination of the University of London, and led to an alteration in the session and terms of Grant College. It is, I think, most desirable that these arrangements should be again most carefully considered, on the principle that everything should give way to efficiency of instruction and of test examination in Bombay, irrespective altogether of other places and circumstances. My idea would be to revert to the original session and period of examination, that the University should appoint four examiners unconnected with the College, one for medicine, another for surgery, a third for midwifery, a fourth for medical jurisprudence; that they should be formed into a Board of Examiners, one being the President; that the examinations should, as formerly, be open to the public, should be written, oral, and practical, and that chief weight should be attached to the two latter forms; that the examiner in each subject should have at least two of his fellow-members present as assessors. That the "First Examination" in anatomy, physiology, chemistry, materia medica, and botany, should be conducted by the professor of the subject, in the presence of at least two of the Board of Examiners, as assessors; these subjects require, as examiners, persons who either are, or very recently have been, teachers of them; and in Bombay the field is restricted to the actual professors-indeed, the same is the practice and the necessity of the University of Edinburgh. In respect to the clinical examination, something of the method and thoroughness of the system explained by Dr. McLennan, in Appendix Y to the Report for 1852-3, should be resumed. It is far superior to any of the methods observed in this country, most of which are of recent adoption, and all of which are subsequent, by two or three years, to the establishment of clinical examination in Bombay. I agree with Dr. Sylvester (in his Report of 1871), in the expediency of removing from the medical curriculum separate courses on pathology. hygiene, comparative anatomy, and dental surgery. They distract the time and attention of the students. A reference to the old syllabuses will show that these subjects, can be, for medical purposes, sufficiently and more methodically taught in their natural connection with medicine, surgery, the institutes of medicine, and medical jurisprudence, provided the professors arrange their courses so in harmony with each other as to economise the time and labour both of teachers and students.

University lectures on hygiene, comparative anatomy, geology, &c., would be of great use in Bombay—unconnected, however, with Grant College, and the medical curriculum. With the limited field of selection of medical professors, and the too frequent changes which take place, there is also an evident practical advantage in reducing the number to the minimum compatible with perfect efficiency—the usage of the majority of the best medical schools, and the present aims of the Medical Council of the United Kingdom.

There is still a subject I wish to notice before ending this already too lengthy letter. It may be objected to my argument against numbers, that, in 1872, there were 1,046 students of different kinds in the Bengal Medical College, and that the ambition of Bombay, of late years, has been to walk in the footsteps of Bengal. Now, my ambition-and I think it should still be the ambition of Grant College-was to keep clear of the defects of Bengal. Refer to p. 113 of the Appendix Y of the Report for 1852-53, already adverted to, and you will find an extract, from the Report of the Examiner of the Bengal College, on the defective state of clinical teaching, and the practical inefficiency of the graduates in 1852. During February 1853, I had ample opportunity of inspecting the Bengal College, and I have now before me the journal which I kept at the time, and I know that the Government Examiner's Report was a mild one. The Bengal College, at that time, was a good anatomical school, but had no pretension to being a pratical school of medicine. The regular students were not even taught to compound medicines; this work was done by the vernacular pupils. It was with these facts fresh in my mind that I, on my

return to Bombay, drew up the Appendix Y, with great care, in the hope of keeping Grant College for ever free of such entanglements and conditions of decay. The hospital alluded to in the Calcutta Examiner's Report was opened when I was in Calcutta. It had 272 beds; eighty-four of them for Europeans. This is still the Hospital of the Bengal College; and I observe from the Report on Calcutta Medical Institutions for 1871, that the number treated in that year in this Hospital, was 4,395, from which—taking the experience of Jamsetjee Hospital as a datum—I infer that the beds do not exceed 300, and that these are the means of clinical instruction of 1,046 students. If so, what was true in 1852, must be very true of 1874.

The Punjab experience of Sir George Clerk, that the graduates of the Bengal College were not practically efficient, and that the vernacular students were more practical, was correct, and he drew from this the conclusion that the English classes were a mistake, and the vernacular classes the right thing. In ignorance of many of the facts, this was a natural enough non-professional conclusion; but I need not take up your time or my own in showing how entirely illogical it was. In 1852, and anterior to it, the vernacular pupils did almost all the hospital work; the English students did little or none of it.

When I sat down to write to you, I did not contemplate so great a trespass on your time; but the recollection of times long past, and of old friendship, will, I am sure, lead you to receive this letter in the spirit in which it has been written.

Believe me, very truly yours,

C. MOREHEAD.

APPENDIX IV.

EXTRACT from DR. CHEVERS'S PRACTICAL NOTES on the ORDINARY DISEASES OF INDIA.

Reprinted from the "MEDICAL TIMES AND GAZETTE," January 13, 1883.

DR. CHARLES MOREHEAD, a man whose admirable published works and noble personal character were universally esteemed by the profession in India, has passed from among us in advanced old age, but without any appearance of bodily infirmity, and with a mind clear, wide, and deep—a fountain of living water, fresh and bright to the very last. Every word written and spoken by Dr. Morehead upon Indian disease is so valuable that I consider myself justified in citing the following passages from his recent correspondence :—

Dr. Morehead's latest Commentary upon the True Enteric and other Fevers of India.*

The following was Dr. Morehead's reply to my inquiry as to his *present* views regarding the occurrence of True Enteric Fever in India :—

"August 9, 1879.

"Our friend Grant has forwarded your note to me, and it has reached me this morning. I am absent in the

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^{*} With this should be read an extract from a recent letter from the same authority to Sir Joseph Fayrer, at p. 170, Climate and Fevers of India

country, away from all books, and shall be so till the 19th, when I return to Edinburgh; so that what I write to you, without delay, is from recollection, but yet sufficiently accurate, I believe, for your purpose.

"Refer to 'Typhoid Fever' in the Second Edition of my 'Clinical Researches,' and to my Report of Sanitary Progress in Bombay from 1830-1860 in the second vol. of the India Office Sanitary Reports (1868), head 'Typhoid Fever,' and you will find the degree to which the opinion in the First Edition of the 'Researches' is altered; and please do not, kindly, refer to me in connexion with this question without carefully considering these references.* Now, in respect to what has been written of Enteric Fever in India since these dates—to the extent that I am informed of it-I would say, that the anticipations formed by me, as expressed in the concluding suggestions of the remarks on Typhoid Fever, in my Second Edition, of a probable epoch of confusion, have been realised; and I hope that the time is near when the subject will be cleared of its doubts and difficulties. I am not acquainted with any Clinical Report of Enteric Fever in India-I mean, which gives the history of an epidemic, including recovered cases as well as fatal, and the ratio of deaths to recoveries: and until this is done the literature of the subject is manifestly incomplete. What I know of it in these later years is from post-mortem reports, chiefly those incorporated by Bryden in his Statistical Papers. I stated in the suggestions above referred to, that we were not justified in concluding that where there was Peyerian ulceration there had of necessity been Enteric Fever. In addition to the exceptions mentioned by me" [at page 161, Second Edition .- N.C.], "you will find in my chapter on Measles in the First Edition of my 'Researches,' one or two fatal cases in which there was Peyerian disease,

* Reference to my chapter on True Enteric Fever in India (Medical Times and Gazette for September 20 and 27, 1879, pp. 336 and 363) will show that this injunction was strictly obeyed.—N.C.

and, if I mistake not, Dr. Harley has somewhere also referred to this connexion. Now, this pathological fact has been in great measure overlooked in these later years in India, and it has been almost universally assumed that the presence of Peyerian ulceration after death is evidence of there having been Enteric Fever during life. I believe it would not be difficult to pick out many of Bryden's reported cases, of which this is a forced and improbable interpretation. In many of them, after six or eight days' illness, there is extensive ulceration. This does not accord—I mean such morbid results after a few days' illness-with the history of Enteric Fever in European countries, and it ought not to be accepted of the disease in India, unless supported by undoubted symptoms during life, and the clinical histories of *coincident* recovered cases. On this point, however, I would remark that it is not improbable that it will be found, if it has not already been proved, that we may fairly look for modifications in the course of the disease as occurring in India, compared with this country, as, for example, in a more marked remittence, and in a more rapid course and a greater mortality, but still not to the degree which belief in Bryden's cases would imply.

"I cannot but think that writers on this disease, and on others common to Europe and India, are too dogmatic in formulating the etiology, the symptoms, and pathology too exclusively from observation in Europe, and that the history of many diseases, as observed in these two fields conjointly, has yet to be written. I feel sure that much of the obscurity, the contradiction, and difference of opinion rest on this, I would say, self-evident principle. I have one observation further—I cannot accept the statement so often put forth, that enteric fever was habitually overlooked by those of my generation of observers. I can say for myself, that I went to India familiar with the fact that, as described by Louis, there was a form of continued fever with Peverian disease, and I of course followed the discovery made by Jenner some fifteen years afterwards, that this was a fever distinct from typhus;

APPENDIX IV.

and it is not likely that, not working with my eyes closed, I should frequently have overlooked it, if it had come under my observation. There is a case of mine, in a girl of the Byculla Schools"-[this is Case 35, of Caroline Smith, at page 95 of the Second Edition. The observation (which Dr. Morehead cites here from memory, not having then his book to refer to) is, "the glands of Peyer were distinct, and there were three or four round ulcers, each the size of a split pea; cicatrisation had commenced."-N.C., — "which has been several times referred to as an instance of this oversight; it will be found that the ulcers in the small intestines were cicatrised—evidence that they were the result of some previous illness, and not of the fever from which she succumbed. But it is useful to refer to particular cases, and I do not think that we are unreasonable in demurring to the verdict that we were ignorant and careless observers, and in continuing to insist that, in our several fields of observation in India, from 1830-60, Enteric Fever was rare, and that its clinical history in India since its greatest frequency has yet to be written; for, assuredly, during this period there has been, and there still continues to be, as I believe, much confusion and error on the subject of Fevers in India."

In a letter, dated two days subsequently, Dr. Morehead observes:—"One further remark before leaving this subject. In a prefatory note to No. 5, *Medical and Physical Society's Transactions*, Bombay, somewhere about 1843, I explained that it was my constant practice to examine all the organs, not only those expected to be diseased, and specially to open the entire tract of the intestinal canal, and I explain my several reasons for so acting. I mention this now as an additional reason for the confidence with which I maintain that I could not—except in a very occasional instance—have overlooked the existence of Peverian ulceration in Indian fevers."

The following observations occur in a commentary upon my chapter on the True Enteric Fever of India, which Dr. Morehead most kindly sent me. I had remarked, "When Dr. Morehead published the first edition of his

treatise, in 1856, he believed that this malady "[Enteric Fever] "did not occur in India, although the type of disease, in some of the cases which he recorded, closely resembled that of Enteric Fever-a fact which he clearly observed when, after describing Case 32, he added. 'While retaining this case in its original position, I must admit that recent inquiry may suggest that it was true typhoid, not adynamic remittent." Upon this Dr. Morehead remarks, "At page 337 you rightly interpret me, with this slight exception : I do not know that you quite recognise that it hangs exclusively on one case (32). Therefore, instead of 'the type of some of the cases,' it should read 'one case.' It was that of a man of the 15th Hussars, quartered for some months in the Town Barracks of Bombay, the sick being sent to the General Hospital under my care. It was, therefore, if Enteric, a sporadic case in a body of men exposed to the same influences; therefore, taken in its connection, it proves little as to the existence of Enteric in Bombay in those days (1840). Case 35 is another which I am said" [not by me-N.C.] "to have mistaken. A girl, after eight days of febrile symptoms, dies; at the end of the ileum were three or four small ulcers the size of a split pea: *cicatrisation* had commenced. Could this lesion be regarded as the result of the eight days' febrile condition, or could it be regarded otherwise than [as] an antecedent lesion? And yet on these two cases,—in the first of which, when first reported in the Transactions of the Medical and *Physical Society*, I remarked on the appearances as resembling those of the European Continued in one of its forms, and this six years before Jenner wrote,-it is affirmed that I was in the habit of overlooking Enteric Fever and calling it Remittent.

"Then further note that the case which I first observed in 1856, and which showed me that Enteric Fever was to be admitted, occurred to me before I had seen the Reports of Ewart, Scriven, Goodeve ('Clinical Researches,' second edition, page 160). Could you have stronger evidence that I had not been purblind during the thirty years of my Indian practice, and that it would be quite as reasonable for European physicians to maintain that my not having witnessed scarlet fever in India was simply an error in diagnosis from having mixed it up with measles, with which I was familiar, as physicians in Europe had done-before Home, some hundred years ago? Medicine can never progress as a science if we cut the Gordian knot of difficulties by assuming ignorance and incompetency in the observers who have preceded us, unless the indications are so manifest as not to be evaded. I entirely agree in the very excellent remarks which you make as to the course which ought to be pursued in the future. I do not pretend to have seen the greater number of the Reports which have come from India, as".... "for these are not accessible to outsiders, but I have seen sufficient to convince me that there is much looseness and inaccuracy and want of the close method and precision which clinical observation and record require before they can be received with perfect confidence. In a word, the hobby has become rampant and run away with its riders, which, as you observe, is exactly what I predicted, but it has occurred to an extent I could not have ventured to anticipate.

"One word of doubt. I am not sure that you interpret rightly the reference which you make at page 336 of your paper, antecedent to 'Twining'" [I give a citation from Annesley, which Dr. Lyons holds to be evidence that enteric fever was observed by that authority in India. -N.C.]. "To me the incident seems to resemble what I describe at page 24, 'Clinical Researches,' second edition, beginning at the Mortality, and on the top of page 28" [Intermittent complicated with diarrhœa or dysentery.-N.C.], "much more than anything allied to Enteric, and I am quite sure that these were not Enteric." LONDON :

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