

Journal Ind.Med.Heritage Vol.XLI - 2011. p 315 to 332

Re-print from Bulletin of the Institute of History of Medicine, Hyderabad 1972, Vol II, No. 1, 35-51.

DR. WHITELAW AINSLIE, M.D., M.R.A.S.
AND
HIS CONTRIBUTIONS TO MATERIA MEDICA
AND HISTORY OF MEDICINE IN INDIA
BY
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“The Materia Medica of Hindoostan,” published from Madras in 1813 and its revised enlarged edition under a new title, “Materia Indica,” printed in London, 1826. In two volumes, are monuments of industry and mines of learning, which have not attracted adequate attention, from the practitioners of European system of medicine in India, for whose benefit these treatises were intended or fully utilized and appreciated by the older practitioners of Ayurveda or Unani, to whom the book would have opened up new vistas or brought fresh cool breeze (oxygen), to increase knowledge and to sustain and encourage faith in their own drugs and to revive the struggle for Ayurveda and Unani, even in the XIX century.

Life Sketch:

The author of these books, Dr. Whitelaw Ainslie, was undoubtedly a remarkable man, whose life and work appear to have been allowed to go into oblivion, even among the British medical officers of the Indian Medical Service, with a few exceptions of the writers on Materia Medica of India. There has not been any comprehensive biography or a full life-sketch, based on authentic records or an adequate account of the contributions and the influence of his life and work on succeeding generations of physicians and medical writers, both European and Indian, in the hey-day of British Empire, in the 19th century and the first half of the 20th century. From the sources available to me, I can only get a few data, about his life. These are like fragments of bones found near a funeral pyre and cannot present even a skeleton, much less, give a true life-like portrait of this British medical pioneer in India.

Ainslie was born on 17th February, 1767 at Dunse, Berwickshire, where his father, Robert Ainslie was Factor to Lord Douglas. Robert Ainslie, correspondent of Robert Burns,

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the Scottish Poet, was his elder brother. He seems to have studied medicine, but no information is available whether he studied in the old fashion, by working first as apprentice to a surgeon or by undergoing the regular course of academic instruction, in the University, under different professors of eminence. At an early age in 1787, he secured C.C.S., the Certificate of the Corporation of Surgeons of England. (The Corporation of Surgeons of England later became in 1800, the College of Surgeons of England) Soon after taking the qualification, Ainslie secured a commission in the medical service of the East India Company and joined as Assistant Surgeon on 17th June, 1788. He was allotted to the Madras Medical establishment and during the next quarter of century, he served in various parts of South India. Crawford in the "Roll of the Indian Medical Service" (1930), mentions the additional academic qualification of M.D., but curiously, does not name the Universities or the year of graduation. Since it is known that, from 1764 to 1800, most of the entrants to the I.M.S, secured their M.D. degrees only from Scottish Universities (Edinburgh, Aberdeen, St. Andrew's and Glasgow), it may be presumed that he was a product of the Scottish Universities, most probably Edinburgh University, whose medical faculty enjoyed international reputation at that period.

On his arrival in India, he was appointed Garrison Surgeon at Chingulput, a town about 40 miles south of Madras. In 1792, he was in an expedition connected with "Operations in Ganjam." In 1792, he was transferred to Ganjam, then in the northern extremity of Madras province (now in Orissa State). In October 1794, he was promoted to the grade of Surgeon. During the next decade and half, his diligence and devotion to his military medical duties, won recognition and appreciation from the East India Company. It is recorded that he drew up a scheme to improve the health of the troops in India. The Court of Directors of the East India Company whilst rejecting (like some Governments) the plans proposed by him, at least, appreciated (unlike some other Governments) his motives in drawing up the report and rewarded him by appointing him, in 1810, as Superintending Surgeon. Four years later, in 1814, he was named Superintending Surgeon of the Southern Division of the Army (Madras).

Ainslie retired on 26th February, 1815, According to the Dictionary of National Biography, Ainslie "resigned in 1815 having served for 27 years apparently with no furlough and returned to England in the autumn of that year." In 1816, the Court of Directors of the East India Company awarded him a sum of 600 guineas, as a mark of the estimation of his valuable services he rendered to the Company.

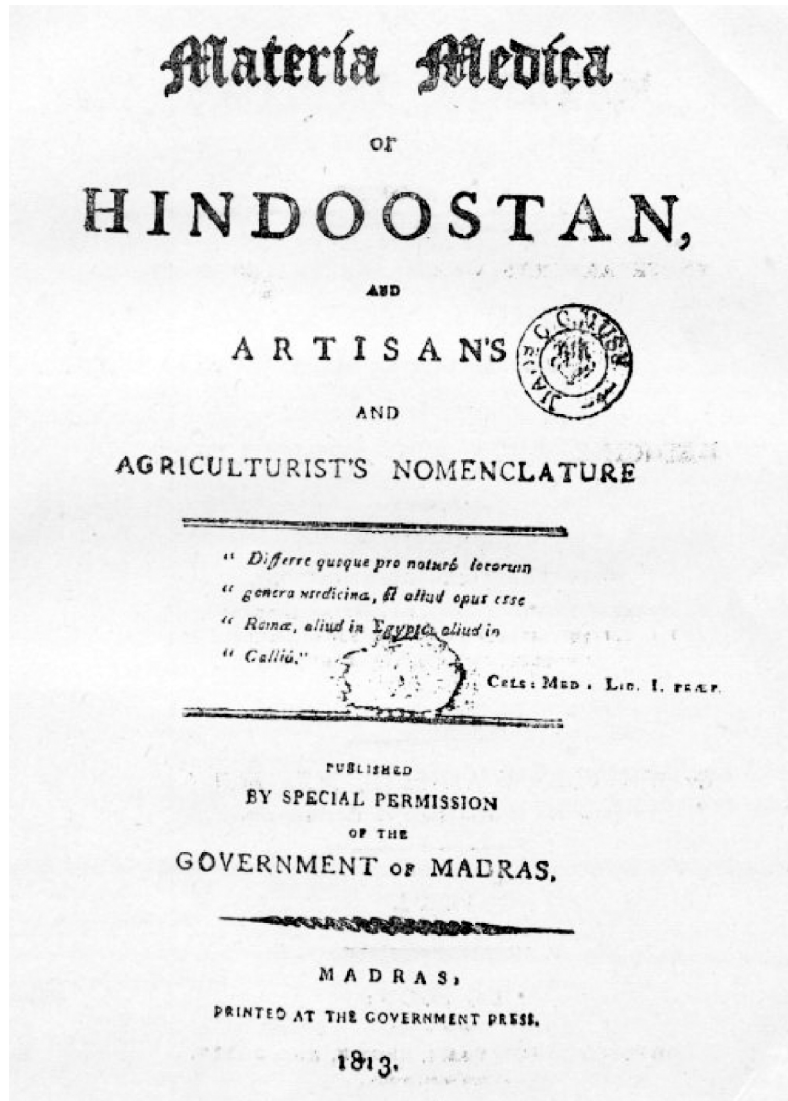
Since most of his service in India was spent in military service, in Garrison duties and field campaigns, in fighting epidemics and taking measures, against insanitation and ill-health of the troops, in cantonments, in camps and in long marches and campaigns and treating the sick and the wounded, during the various actions of the army in different battle fields, in those days, without facilities of transport or proper accommodation or facilities for reading and writing, he did not have the advantages of the medical officers of a later period, who were fortunate enough, to become Surgeons in the Presidency Hospitals in Calcutta, Madras and Bombay and teachers in the Medical Colleges, after the opening of the medical schools, two decades after he retired. Even under the difficult conditions of service and with all the serious handicaps of a military service, with no libraries at hand, he seems to have done enormous reading, made many acquaintances, among the learned people in the Telugu country and Tamilnadu and Kerala, collected enormous amount of information and industriously arranged the materials and produced reports and books, which still excite the wonder (and despair) of the scholar, scientist and physician, of today.

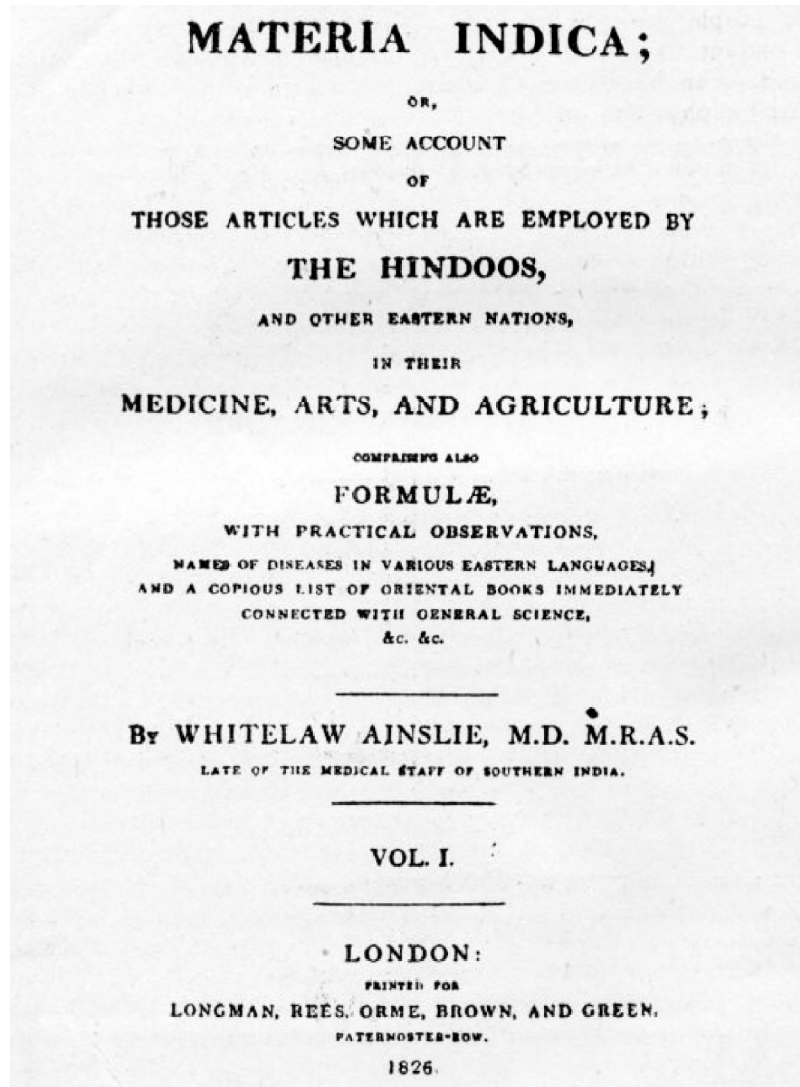
It is not known how many reports of his are lying buried in the Madras Records Office or in the National Archives or in the other collections in India. There are many manuscript records of his reports in India Office Library. Even a search and cataloguing of these records and reports of Ainslie may be a worthwhile study for a student of History of Military Medicine in India and may be a good subject for a student of History of Military Medicine in India and may be a good subject for a Ph. D., in any advanced centre of learning, like Armed Forces Medical College, Poona, or for a monograph, from the Directorate of Armed Forces Medical College, Poona, or for a monograph, from the Directorate of Armed Forces Medical Services or from any Pharmacological Department of a Post-graduate Institute.

Medical Writings:

The list of medical writings of Ainslie is given below:-

(1) The use of Balsam of Peru. (1811), (2) Edible Vegetables (1811), (3) *Materia Medica of Hindoostan*. (Madras, 1813). (4) (In conjunction with A. Smith and M. Christy) "Report on the Cause of Epidemical Fever", which prevailed on the provinces of Coimbatore, Madura, Dindigul, and Tinneveli. (1809-10-11) published in London, 1816, 8 vo. (5) *Observations on the Cholera morbus of India*. (London, 1825). (6) "Material India" 2 volumes. (London, 1826). (7) "Medical Observations", contributed to Murray's *Historical and Descriptive account of British India*." (London, 1832).





Other Writings:

During his retirement, he was engaged in persuing some of his favourite medical subjects and also occasionally occupied himself by launching into different branches of literature writing "Clemenza", or a Tuscan orphan, a tragic drama in 5 acts (in 1822). By 1826, he was M.R.A.S., (Member of the Royal Asiatic Society of Great Britain and Ireland) in recognition of his scholarship in Oriental learning. In his old age, in 1835, he wrote a historical sketch on the introduction of Christianity into India.

For his professional eminence, he was knighted on 10th June 1835. Two years later, on 29th April 1837, Ainslie died in London.

Ainslie's Prefaces in Vol. I & Vol. II of *Materia Indica*-1826

The two essays written by Whitelaw Ainslie, as a sort of introduction, to Volume I & II of his *Magnum Opus*, the "*Materia Indica*," display his profound knowledge of history of ancient civilizations, his wide acquaintance with the medical literature of Europe, his deep insight into the philosophy and sciences of ancient India and an unbiased scientific attitude in the study of the medicinal virtues of the Flora of India and a great love for the promotion of cultivation of medicinal plants in India.

He records, in the text of the books, not only the names of the particular drugs in different Oriental languages and in scientific literature, but also gives brief descriptions based on comparative studies of the Flora of West Indies, Japan, Cochin-China in India. Then, he adds the views contained in the indigenous medical treatises, and supplements them by his personal enquiries or investigations, incorporating the replies and experiences of the indigenous practitioners, the numerous learned Vaidyas and Hakeems of South India, as well as the medical officers of East India Company, whom he seems to have contracted and consulted, very often, in the course of his long service and scientific enquiry, in different parts of South India.

MATERIA INDICA (1826) VOLUME I

"*Materia Indica*" was published from London, in 1826, in two volumes. The first volume contains the dedication of the book to His most fradcious Majesty the King, and is followed by a preface. He also adds a table showing the orthography adopted, weights and measures taken from Dr. Heyne, forms of prescriptions in use among the native medical practitioners and explanation of the abbreviations used in the work. In the concluding portion, he refers to the articles of material medica for which India was then indebted to America or West Indies and expressed a hope, that some of these medicinal plants, may be cultivated, in some parts of Travancore, Bangalore or Nilagiri mountains.

Preface in Vol. I.

This publication is, properly speaking, the second edition of that which was printed in India, in 1813; under the title of “Materia Medica of Hindoostan. and Artisanâs and Agriculturistâs Nomenclature;” but as much new, and, I trust, interesting matter has been obtained since that time, in the various branches treated of, I have thought it advisable to give the book a somewhat more comprehensive appellation.

“The very flattering manner in which the Madras edition was received by all the high authorities in India, the general utility of which it was found in that country, the subsequent approbation it met with from the Honourable the Court of Directors, and the numerous applications that have been made for it since out of print, have induced me to lay before the public this enlarged, and, I hope, much improved work.

It had long been a source of regret that there was no where to be procured a correct list of the different articles employed by the natives of Hindoostan in their arts and manufactures, nor any sufficiently full and detailed account of their medicines. It was with a view of remedying these evils in some measure that the treatise was originally undertaken.

In adopting another name for it, I have; at the same time, deemed it proper to change the arrangement. and have divided it into distinct parts: the first of these comprehends such of our drugs as are found in India and other Eastern territories: in it, I have attempted to give some account of their different uses amongst the inhabitants of those regions and have also noticed several articles of diet as the most proper for the sick and delicate. In fact, it has been my study, to the best of my ability, to supply what has long been wanted, a kind of combining link betwixt the Materia Medica of Europe and that of Asia, Of the other parts of the work I shall say but little here, as each will have its appropriate Preface: thus much, however, I may observe, that in Volume II. will be seen a description of those medicines which are almost exclusively employed by the Hindoos and other Oriental nations: and that the remainder of the Materia Indica will be found to treat of such articles as are used by them in their arts and manufactures; and also of those vegetables which are cultivated as food, and which will be observed to embrace a very numerous list; the natural consequence of this circumstance, that as a large proportion of the natives of India are prohibited by their religion from eating animal food, they have naturally been led to seek for a luxurious variety from another kingdom

That the volumes now with great diffidence laid before the British public have many defects I am but too well convinced: that they contain matter which may be considered as

new in the mother country will not, perhaps, be denied: that they are the result of long and patient investigation. I myself feel. The path which I pursued was no beaten tract but winding, and often scarcely to be traced; over grown with innumerable useless and noisome weeds, yet occasionally adorned by flowers of rare beauty, and other possessing still more valuable qualities. If I have been so fortunate as to cull a few that may ultimately prove of real utility to mankind. I shall regret neither the time nor the labour that I have bestowed in the search; and may then, too, be excused for having dragged into public notice some of Nature's fairest offerings, with little to recommend them, but "a brilliant aspect and an empty name."

As might naturally be supposed, several of the drugs mentioned in Vol. I cannot be found in any of the provinces of India in such quantities as to preclude the necessity of regular supplies from established stores; nor are they always to be met with of the best quality; yet it must be gratifying to know what those medicines are that can be procured in the bazaars, or gardens of the wealthy inhabitants, in cases of extremity.

The Sanskrit name for many articles are so numerous (synonyms), that there has been some difficulty in selecting; a circumstance which it is necessary to mention, as the reader no doubt will occasionally find amongst them appellations that are not familiar to him; and it is also to be observed, that as in the wide range of territory in which the different languages are spoken, there cannot fail to be a variety of terms and dialects, the reader must expect, now and then, to meet with spellings and terminations which he is perhaps not accustomed to. For such peculiarities there is no remedy. The Tamool and Tellingoo adopted, are those of the most learned Hindoos of the southern provinces of India; Brahmins from the pagodas of Madura, Seringham, and Tanjore.

FROM MATERIA INDICA (1826) VOLUME II

"To a minute investigation of the peculiar virtues of certain plants and herbs, the Indians of old were naturally incited by the vast variety and beauty of the innumerable vegetable productions which cover the face of their fertile territory: these in some places grow up spontaneously; many applied to sacred purposes, the ministers of religion reverently cherished; and many the hand of traffic diligently cultivated for exportation."

Indian Antiquities, Vol. VII. P.624

PRELIMINARY OBSERVATIONS

Ayurveda:

“It is much to be lamented that it was ever found necessary to include the sciences, and arts, a circumstance which has been hitherto an insurmountable obstacle to improvement; and is no doubt; and is no doubt, one of the causes why medicine in India it still sunk in a state of empirical darkness.

“The Ayurveda, as the medical writings of the highest antiquity are called, is considered to be a portion of the fourth or Atharva Veda, and is consequently the work of Brahma, who composed the four immortal Vedas; this Ayurveda was communicated by Brahma to Dacsha, The Prajapati and by him, the Aswins, or sons of Surya (the sun) were instructed in it; and them became the medical attendants of the Gods: a genealogy which cannot fail recalling to remembrance, the two sons of Esculapius, and their descent from Apollo. The Aswins, it is believed by some first made Indra acquainted with medical science contained in the Ayurveda and that he was the preceptor of Dhanwantrie; others are of opinion that Atreya, Bharadwaja and Charaka were instructed in the mysteries of the healing art, prior to Dhanwantrie; be as it may, Charaka’s work is still extant, and goes by his name. Dhanwantrie is some times called Kasiraja (Prince of Kasi or Benares); his disciple was Sisruta, son of Viswamitra, a contemporary of Rama; his work (Susruta’s) still exists; it is supposed to be of great antiquity, perhaps the oldest, with the exception of that of Charaka, which the Hindoos yet possess.

The Ayurveda itself is said to have originally consisted of one hundred sections of a thousand stanzas each; it was adapted to the limited faculties of man, and was divided into eight parts, comprising the whole of the ars medendi amongst the Hindoos; according to the valuable account above mentioned, they were the following:-

- I. Salya, which instructed in the art of extracting extraneous substances that chance or mischief may have forced into the human frame.
- II. Salakya. This treated of external organic affections, such as diseases of the eyes, ears, & c.
- III. Kaya Chikitsa. This treated of the application of the healing art to the body in general.
- IV. Bhutavidya. This treated of the restoration of the faculties from a deranged state, induced by demoniacal possession.
- V. Kaumarabhritya. The subject of this was the care of infancy; it also embraced the treatment of puerperal disorders in mothers and nurses.
- VI. Aagada. This taught the mode of administering antidotes.
- VII. Rasayana. This treated of chemistry, or more properly speaking, alchemy.

VIII. Vajikarana. This taught how the increase of the human race could best be promoted.

Sir William Jones informs us, that the Ayurveda has been almost entirely lost in the lapse of ages; but that he had met with a curious fragment of it; in which he was surprised to find an account of the internal structure of the human frame. Whatever may have been done, however, in this way, in former times, it is to be regretted that the custom of dissecting and examining the dead subject, does not now exist amongst the Hindoos; indeed it is, I believe, contrary to the Brahminical tenets of the present day: so that all the knowledge they have of the anatomy of man, can be little else than conjecture, formed from what they may have seen in looking into the bodies of brute animals.

With regard to the surgical knowledge, the ancient Hindoos possessed, however neglected that branch of medicine may now be in India, it will, I think be allowed, from what has been advanced respecting the two first subdivisions of the Ayurveda, viz., Salya and Salakya, that those must have treated of surgery, strictly so called; and it has clearly been ascertained, that in the first portion of a commentary on Susruta's work, already noticed, many valuable surgical definitions. The second portion of the commentary is the Nidana St'hana or section of symptoms or diagnosis. The third is the Sarira St'hana, the subject of which is anatomy. The fourth, Chikitsa St'han, treats of the internal use of medicines. The fifth, Kalpa St'hana gives copious list of antidotes. The sixth and last is the Uttara; it is a supplementary section on various local diseases or affections of the eye, ear, &c. in all those portions, however, it would appear from the testimony last quoted, that surgery, and not general medicine, is the principal object of the commentary.

The instrumental part of surgery, was, according to the best authority, of kinds, Chedana, cutting, or excision; Lekhana, which signifies drawing lines, appears to be applicable to scarification and inoculation; Vyadhana, puncturing; Eshyam, probing, or sounding; Aharya, extraction of solid bodies; Visravana, extraction of fluids; Sevana, or sewing and Bhedana, division, or excision.

The mechanical means employed in Hindoo surgery seem to have been numerous; those were generally termed Yantras, including a great variety of instruments (Sastras), and having distinct names, corresponding with the purpose for which they were intended; such as tongs (Sandansas), needles (Suchi) teeth instruments (Danta Sanku), saws (Karapatra), tabular instruments (Nar i) lancets (Mandalagra), knives (Ardhadaras), bistories (Kucharica); of bandages according to Ubhatta, or Baghbhatta, there were no less than fourteen kinds; of rods and sounds, and instruments for eradicating nasal polypi (Namra so common and troublesome in India, there were also a great variety; then again in their

surgical pharmacy, they appear to have had, frequently, recourse to Kshara, which signifies alkaline salts, or solutions, as are directed in Saranghadra. The actual cautery, with heated metals (agni) is very commonly employed by the Hindoos of the present age, who also not unfrequently use a cautery prepared with hot seeds combustible substances, or inflamed boiling fluids of a gelatinous or mucous consistence; but as has been said / in speaking of anatomy, whatever may have been done in former times, it may be justly observed, that no operations in Surgery of any nicety, are now ventured on by the medical men of India; certainly, not by the Tamool or Tellingoo practitioners of the Southern provinces, where, however, dislocated joints are replaced, and fractured limbs set with tolerable skill, by a class of men called in Tamool Kayungkatu gara Atuvanien, who also apply leeches, &c. The Mahometan doctors, Hakeems, occasionally bleed and couch for the cataract, which last is done in a very clumsy and uncertain manner. We learn from Mr. Crawford's excellent History of the Eastern Archipelago (Vol.i p.329) that neither are the Malay doctors much in the habit of taking away blood; like the Hindoos they have much faith in incantations, but never feel the pulse: in this last respect differing essentially from the Indians, who distinguish no fewer than "twenty kinds of pulse.

"The Vitians or Vydias (Physicians) being sudras, are not permitted to peruse the sacred medical writings (Vedas), which are guarded with religious awe by the Shrestee Brahmins; but they have free access to many professional tracts, (Sastras) which correspond with, and are, in fact, commentaries on them. These are said to have been composed by prophets and holy men of antiquity (Maharshies), to whom is generally given a divine origin, such as Aghastier (whose work has just been quoted)."

Claims of Priority:

"This is no place to enter minutely into the discussion which has so long engaged the attention of mankind, regarding the claims of priority of Hindoostan over other countries, with respect to the cultivation of the human mind; nor have I sufficient of Eastern lore, to enter with confidence on the subject; much has been said on either side, and we know that there are some very enlightened individuals, who acknowledge, that they begin to lose faith in the assumption, that the Hindoos had made great progress in the arts and sciences, at a time when other nations were, if I may use the expression, still in their cradle. Nay, these gentlemen further state, that they "have now the strongest grounds to suspect, that in many cases the knowledge of the Indians was borrowed at second hand, from the communication of their Persian and Arabic conquerors, who themselves had been instructed by the creative genius of the Greeks" (See Edinburgh Review, for May 1811).

In opposition to this, Mr. Maurice observes, in his *History of Hindoostan*, (Vol.i, p.79), “the genius of the Hindoos was ever too proud to borrow either ceremonies of religion, or maxims of policy from their neighbours ; the Egyptians, if they did not appropriate to themselves the ancient mythological rites, and symbols, of India. have perhaps derived both from one primitive source of Cuthite profanation;” and it may be further noticed, that I have not been able to hear of any translations that ever were made of medical writings from the Arabic into the Sanscrit; but there is existing evidence of the borrowing of the Arabians from the Hindoos, which the reader may convince himself of, by referring to the list of Arabic books, in the second volume of this work.

Let us see what the learned Mr. Bryant has said on this point in his *New System of Ancient Mythology* (Vol. iv, pp. 256-257.): “From circumstances of this nature, many learned men have contended, that the Indians and even the Chinese were a colony from Egypt, while others have proceeded as warmly upon the opposite principle; and have insisted that the Egyptians, at least their learning and customs, are to be derived from the India and Seres; but as either opinion is quite true: nor need we be brought to this alternative for they both proceed from one central place; and the same people who imported their religion, rites, and science into Egypt, carried the same to the Indies and the Ganges, and still farther into China, and Japan; not but that some colonies undoubtedly came from Egypt. But the arts and science, imported into India, were derived from another family, even the Cuthites of Caldea, by whom the Mizraim themselves were instructed, and from Egypt they passed westward.”

[The author gives a brief outline of the religious institutions of Hindoos, since the chronology, science and literature of Indians, are all intimately interwoven with their mystical theology. He then cites authorities for the early intercourse between Iran and India and the resemblances of Zend to Sanskrit language, the common features of religion of ancient Persians and of Brahmins and then discusses the claims of priority in favour of the Hindoos.]

“I have already touched on the claims of priority which have been advanced in favour of the Hindoos, with Hindoos, with respect to the cultivation of science and literature, as those come blended with the peculiar cast of their religious Opinions; and here it may be considered, as not irrelevant, to quote again from Mr. Chatfield, “Whether it is to be believed that colonies were anciently sent from the Nile to the Ganges, and to China, or that the Western shores of the Red Sea and the plain of Thebaid were plant from India, there can be no hesitation in agreeing; with Sir W. Jones, that the Egyptian Indian, Grecian,

and Italian superstitions, proceeded from one central point, and that the same people carried their religion and sciences to Japan.”

We learn from a Dissertation on the Gods of Greece, Italy, and India, by Sir W. Jones, that Sonnerat has referred to a publication by M. Schumit, which gained the prize at the Academy of Inscriptions: “On the Egyptian Colony established in India” this Establishment, Sir William is not inclined to dispute, but seem to hold it more probable that they (Egyptians) visited the Sarmans of India, as the sages of Greece visited them, rather to acquire than impart knowledge. But however all that may be, continues the great Orientalist, “I am persuaded, that a connection subsisted between the old idolatrous nations of Moses; but the proof of this position will in no degree, affect the truth and sanctity of the Masaic history; which, if its confirmation were required, it would rather tend to confirm.”

[The author then refers to Sir William Jones’s view of the antiquity of Vedas and Colebrooke’s “Essay on the Philosophy of the Hindoos,” and proceeds to give a brief account of the schools of Meta-Physics and of Meemamsa, Sankhya, Nyaya and Viseshika. He next refers to the polite literature of the Hindoos, like Ramayana, Mahabharata and the Kavyas and dramatic literature, in the golden age of Sanskrit and the dramatic literature, in the fables of Hitopadesa, etc. then he briefly reviews the dramatic literature, in the fables of Hitopadesa, etc. then he briefly reviews the achievements of Hindoos, in sciences, by citing works on Arithmetic, Algebra, Astronomy, Botany and pays a tribute to the Sanskrit language, “without an equal in the world,” and “studied attentively by some of the men of whom, England is justly proud and whose names must ever live, while talent can dignify oriental literature be revered.”]

“Perhaps I cannot conclude this part of my Preliminary Observations better than by an eloquent eulogy on India, which I have found, in a foreign work (Religions De L’ Antiquite, par J.D. Guigniaut): “If there is a country on earth which may claim the honour of having been the cradle of the human race, that country is India; if there is a religion which explains itself by the powerful impression of nature, and by the free inspirations of the mind; the forms and conceptions of which are at once simple and profound; that religion we find still flourishing on bank of the Ganges, with its priests and its fanes, its sacred books, its poetry, and its moral doctrines. Always ancient, yet always new, India stands over her ruins, like an eternally luminous focus, in which concentrated those rays which for ages enlightened the world, and which never cease to shine.”

Medical works:

“The Hindoo medical writers generally preface their works with an account of climate, weather, situation, soil &c.; they are very particular in their directions regarding the proper time of the year for collecting medicines, as well as the mode of preparing them, ascertaining their doses, and prescribing them; they are most minute observers of the state of the pulse, and place great faith on a strict observance of proper diet. Diagnosis they arrange under the seven following heads: temperature of the body; the appearance of the eyes; the mode of speaking; the colour of the face and body; the state of the urine; of the stools; and of the tongue. Some of their notions of prognons are excellent, others very strange, any, truly, absurd. As an example of the first, I would mention those favourable symptoms: when the natural tones of the patients’s voice remain unaltered; when he wakes from sleep without agitation; and when eating rather cools than heats his frame. Amongst the second, I have been amused with this, “Attention to the position of stars may likewise give us considerable information respecting the fate of our patient.” But one of their most happy indications of returning health (and the sentiment is virtuous and laudable) is; when the sick person forgets not his God amongst his sufferings, but daily prostrates himself in prayer with humility and resignation.”

Native Physicians:

“I shall not, perhaps, find a better occasion than the present to do what I conceive to be a justice to the Hindoo medical men, attacked as they have been somewhat roughly by Monsieur Sonnerat, in his excellent and interesting ‘Voyage to the East Indies.’ (Vol. ii. p. 136-137 English Trans) That gentleman says that the Indians are mostly all pretenders to some knowledge of medicine; that there is not one physician amongst them more learned than another, that they are generally individuals who have been washer men, weavers, or blacksmiths, but a few months before; and, to crown all, that they administer few remedies internally, and make little use of ointments or cataplasms. In reply to the latter part of this gentleman’s remarks, I shall only offer a perusal of the second chapter of this part of the work, and the list of Tamool medical books in that chapter to the former, I must say, that either Mr. Sonnerat has been a little very different description from those he alludes to. That there may be occasionally found in India, as well as other countries, men, who with more impudence than education or talents, push themselves into notice, will not be disputed, but it is as certain that there are many Hindoo physicians who are doctors by long descent, who from their early youth have been intended for the profession and taught everything that was necessary respecting it. Not a few of them have I known, who were not only

intimately acquainted with all the medical Sastras, great part of which they knew by heart, but who, in other respects, were in their lives and manners correct, obliging, and communicative. And I am happy to see that a character nearly similar to this, has been given of the same description of people in Bengal, by Sir William Jones. who speaks of them in the following terms: 'All the tracts on medicine must indeed be studied by the Vydyas (doctors) and they have often more learning and far less pride, than any of the Brahmins; they are usually poets, grammarians, rhetoricians, and moralists; and may, in fact, be deemed the most virtuous and amiable of the Hindoos.' And are we not told, that so highly has medical skill been prized by the Indians, that one of the fourteen Ratnas, or precious things which their Gods are believed to have produced by churning the ocean, was a learned physician.

Medical Treatises of the South:

The Hindoo medical treatises (Vaghdum), we are told, were all written many hundred years ago, but at what exact period it is next to impossible to ascertain as dates are very rarely affixed to, the manuscripts and whatever questions are put, touching particular eras to those Brahmins who might be supposed best able to reply to them, they are invariably answered in an unsatisfactory manner; a lamentable fact, which is, I perceive, also noticed by Dr. Buchanan (now Hamilton), in his *Journal Through Mysore, &c.* (Vol. i.p.335).

The different nations or tribes of India have their respective medical authors, whose writings are of more or less repute. Those of the Hindoos of Upper Hindoo-stan are numerous, and are nearly all in Sanscrit. They are highly venerated, the natural consequence, we must conclude, of the very dignified character which the Brahminical institutions have long maintained. But the medical books which more particularly call our attention are those of the Tellingoo but in Sanscrit, and are either transcripts of tracts common in the higher provinces, or written by some of the Maharshies (saints) of Lower India. They are all inverse, and remarkable for the minute, though strange descriptions they give of the symptoms of diseases; they, at the same time, betray a woeful ignorance of the internal economy and nicer functions of the human frame; and are but too often obscured by mystical illusions, and a blind belief in the power of magic and enchantment

The Tamool medical works, on the other hand, are many of them originally written in what is called high Tamool (Yellacanum) which is allowed to be a richly cultivated language, and peculiarly energetic. The poetry (Cavi) in which all scientific works are written, is much admired by those who have made it a study; so liberal would appear to be the poetical license in permitting, as in the Greek, the transposing altering, and occasionally

altogether taking away certain letters, in order to harmonize and vary the rhythm; and so much care is ever bestowed on the construction of the various measures. Those sastrums are supposed to be more valuable than many which are written in Sanscrit: they are said to be less shackled with the mythological doctrines of the original Ayur Veda, to contain a greater number of valuable formulae, and to show a still more minute attention to the enumeration of morbid symptoms; but, like them, they evince a firm conviction in the belief and intervention of evil spirits and offer many curious rules for averting their machinations.

There are no medical tracts of any note in Dukhanie. Such of the Hakeems (Mahometan doctors) as have any pretensions to learning are sufficiently well acquainted with the Persian and Arabic, to read with ease, the professional works that are written in those languages; and some of them, by combining a knowledge of the Tamool Materia Medica, with the opinions and doctrines which they find in the books they peruse, possess a great deal of information, and are, in general, men of polite manners, unassuming, liberal minded, and humane.”

Materia Medica of Hindoos:

“It is with great diffidence that I enter upon the subject proposed in this volume of the work, yet when I consider how little attention has hitherto been paid to the Materia Medica of the Hindoos, and how scanty are, consequently the sources of knowledge regarding it, I am induced to hope that every allowance will be made for whatever defects may appear. Anxious I certainly have been to procure some guide in the investigation, some manual in one or other of the languages of Europe, that might have aided me in the prosecution of so interesting an inquiry; but I looked in vain. I have, therefore, been under the necessity of altogether trusting to what information I could collect from Aghastier’s work, already mentioned, and other Sastrums, as also from the general botanical works of Rheede, Rumphius, and Loureiro, and from such Vytians and Hakeems as appeared to be the best suited to assist me, with occasional hints from the writings of Dr. Roxburgh and the travels of Buchanan (now Hamilton). For the Hindoostanie names of many articles, as well as much useful information, I am indebted to Dr. Fleming’s “Catalogue of Indian Medicinal Plants and Drugs,” a work so admirably executed, that it is only to be regretted that it is not more voluminous: and since the publication of my “Materia Medica of Hindoostan,” I have to state, that I have seen Dr. Heyne’s “Tracts Historical and Statistical on India,” in which the names of several native medicines are given, but scarcely one word of their virtues, or external appearances.”

“The articles employed by the Hindoos in medicine are extremely numerous, much more so than those of any *Materia Medica* in Europe and in the state of empirical obscurity in which the science is still sunk in India, it will readily be believed that many substances are daily prescribed with but trifling *virtus*, if, needed, any to recommend them. As for these of which I am now about to give some account I can only say, that in my selection, I have been entirely influenced by the opinions of the native practitioners, whom I consulted in the research; nor can I, from any positive practice of my own, aver that the properties of many of the different drugs are such as they are said to possess. It is true, that to gain the best verbal information respecting them, every exertion in my power has been made; yet it must be confessed, that much is still to be performed to bring this branch of Hindoo medicine to a state even approaching to perfection. Nay, in the present attempt, I am well aware that I have done little more than call the attention of the medical men of India to a subject, which has, hitherto, perhaps been too much neglected; and I shall, therefore, consider myself as not ill - requited for my efforts, if these pages should prove but the happy means of exciting in others a curiosity that may ultimately lead to greater undertakings and more definite and valuable results. In the mean time, I cannot too strongly inculcate the greatest caution in administering many of the medicines included in this chapter; the greater number by far of which can be viewed in no other light than as objects for further and patient investigation. The crude notions of the *Vytians* (industrious and well-meaning, however, those individuals may be), though they may ultimately lead to important truths, are not to be taken without distrust. That various substances, possessing powerful qualities, have been brought forward, will not, I presume, be disputed; that others, of more dubious or trifling properties, have also found a place, I am willing to admit. Let it be the business, then of future experience to confirm or reject whatever may be ascertained to be in its nature sedative, benign, narcotic, or altogether inefficacious.”

“There are other embarrassments which I must here notice, amongst those which I have had to encounter on the present occasion; for instance, the imperfect condition in which a great many of the medicines are found in the bazaars; old, dry, and notseldom decayed. I have frequently been obliged to take on trust a description of their characterizing taste and smell; at other times, the root, or bark, or leaf, called for, was not to be found; so that I was under the necessity of giving an account of it from the observation of others. With no pretensions whatever to any critical knowledge of botany, I have, in every instance, trusted to the best descriptions which it was in my power to obtain from other sources. Such obstacles being in my way, it can easily be conceived how great the difficulties I must

have combated, in ascertaining the scientific names of the different plants, several of which, it will be observed, I have altogether failed in discovering; and for many of those inserted, I am indebted to the kind friendship of the Rev. Dr. Rottler, whose scientific skill and accurate acquaintance with the native languages, so peculiarly fit him for Indian research.”

The greater number of the articles mentioned in this volume, are parts of plants which grow in India; and are to be met with in the jungles, amongst the woods of Malabar, and mountains of the lower tracts of the peninsula, and, more especially, in Travancore, that country so beautiful, so rich, I may say, in vegetable productions; others are the produce of neighbouring or distant Asiatic territories, a circumstances which adds greatly to the difficulty in ascertaining the botanical appellations of the plants to which they belong.”

Need for reprinting these books:

These books are out-of-print and very difficult to acquire and much more difficult to get on loan for reading. In my opinion, they deserve to be reprinted in India, by an off-set process (as medical classics of Europe and America are being printed by patriotic publishers there today) for the benefit of the teaching and research institutions, libraries, and for individual scholars, scientists and investigators, both in India and in other countries, wherever Indian studies are encouraged.