exhausted by long continuance or frequent repetitions, nor accumulated by exposure to natural light; it is, therefore, not dependant upon any foreign source, but *inherits as a property in a peculiarly organised animal substance or fluid*, and is regulated by the same laws which govern all the other functions of living beings."

Your very faithful servant,
JAMES MACARTNEY.

35, Upper Merrion-street, Dublin,
June 11, 1842.

COLLECTANEA MEDICA.

FROM THE NOTE-BOOK OF

J. D. JEFFERY, Esq., Surgeon, Sidmouth.

ABERCROMBIE'S MAXIMS FOR MEDICAL MEN.

1. Cultivate a habit of steady and continuous attention.
2. Exercise strict control over the succession of your thoughts.
3. Keep up an animated, inquiring state of mind.
4. Maintain a habit of correct association of facts according to the relation of cause and effect.
5. Select carefully the subjects to which the mind is directed.
6. Carefully abstract the operation of the judgment from the influence of imagination or passion.

DIFFICULTIES OF THE MEDICAL PROFESSION NOT TO BE CONSIDERED AS DISCOURAGEMENTS.

From the picture that has been exhibited of the innumerable doubts and difficulties which clog the attainment of medical knowledge, and embarrass the application of it to practical purposes, the timid, sceptical, and indolent may be discouraged from studies, apparently so arduous in their prosecution, and so questionable as to the efficiency and utility of their result. But it is not from characters of this description that any good can be expected in any of the useful arts of life.

If a like despondency were to pervade mankind in general, there would be an end to all that enterprise and energy which alone can enable them to act up to their destiny, and follow up those pursuits upon which the perfection of their nature depends.

As the senses would have lain dormant for ever had there been no external objects to stimulate them, so the faculties and virtues which characterise rational nature and civilised life would never have been developed, but through the excitement of those pains, wants, difficulties, and dangers inseparable from human life. By no other arrangement could our duties, our happiness, our mental and bodily perfections, have been bound together in one harmonious and consistent system.

Let us compare the art of medicine, under this aspect, with those of navigation and agriculture.

Had man been furnished by the Creator with wings, by which he could have traversed all seas and oceans, so as to supersede the use of ships, where would have been that hardihood of character and all those ingenious devices which have called forth the active energies and deep researches of the human mind?

If, contrary to the actual institutions of Providence, the life of man had been sustained by the spontaneous productions of nature, instead of the products of

industry, neither the faculties of the mind nor the powers of the body could ever have been developed; man would have been little superior to the brutes; his active and inventive energies would have lain asleep for ever; there would have been no room for the talents exercised in the procuring of food, raiment, and shelter, nor in commercial intercourse; all the mutual and endearing ties of social and civilised life; all trades and professions, arts and sciences, whether ministering to accommodation or elegance, constituting man's greatest felicity, whether as objects of pursuit or enjoyment, would have been unknown and untasted.—*Sir G. Blane's Medical Logic.*

ANECDOTE FLATTERING TO THE MEDICAL PROFESSION.

But the anecdote most flattering to the medical profession which I should recal to your remembrance, is the occasion of the first establishment of the East India Company's power on the coast of Coromandel, which was procured by the favour of the Great Mogul to one of our profession (Gabriel Boughton, of the ship *Hopeful*), in gratitude for his efficient help in a case of great distress to the monarch.

It seems that, in the year 1636 (a very early period of our direct intercourse with India), after the Portuguese had discovered the passage thither by the Cape of Good Hope, one of the princesses of the Great Mogul's family had been burnt dreadfully by accident, and that a messenger was sent to Surat, where foreign traders resorted, to desire the assistance of one of the English surgeons there, for they had acquired a great reputation among the natives for their skill in the cure of diseases. Gabriel Boughton proceeded forthwith to Delhi, and was successful in performing a cure; on which the Great Mogul's minister asked him what his master could do for him to manifest his gratitude for so important a service. Gabriel answered with a disinterestedness, a generosity, a patriotism beyond my praise, "Let my nation trade with yours." "Be it so," said the minister. A portion of the coast was marked out for the future resort of English ships, and all duties were compromised for a small sum of money. A better station, it is true, at the mouth of the Hoogly river, some twenty years afterwards, was chosen, and Calcutta was built; but here was the first establishment of our power—here did the civilisation of that vast continent begin. From hence the blessed light of the gospel may have been first promulgated amongst one hundred millions of native idolators, since subjected to British power, and made partakers of our enlightened comforts."—*Sir H. Halford, Med. Gaz.*

ASTHMA—DR. CLUTTERBUCK'S VIEWS.

Difficulty of breathing (*dyspnœa*) may arise from various causes affecting the organs of respiration; the most frequent, perhaps, is a preternatural thickening of the membrane lining the air tubes, the consequence of repeated catarrhal inflammation.

When the affection returns periodically, it has been called nervous or spasmodic asthma—implying, of course, that the immediate cause of the paroxysm is spasmodic action of the muscles.

But no muscular structure is found in the course of the air tubes, with the exception of the larynx; and it is quite evident, from the manner of breathing in these cases, that the impediment is not seated in that part of the tube. During the paroxysm of asthma, the air passes into and out of the lungs slowly, and

with great labour and effort on the part of the muscles, both of inspiration and expiration, exactly in the way we should expect from a narrowed state of these passages. Now, there is no necessity for supposing the existence of spasm in order to explain the difficulty of breathing in such cases; it is sufficient to show the way in which the paroxysm may take place without the aid of such a cause.

In most cases of periodical asthma, the disease may be traced back to catarrhal inflammation as its source. Repeated attacks of this inflammation induce, at length, a permanent thickening of the membrane affected, and accordingly it is found I believe with hardly any exceptions, that asthmatic patients breathe with more or less difficulty at all times, and in such a manner as to indicate clearly a narrowing of the canal in the smaller ramifications of the tube. Any additional impediment to breathing, therefore, will cause such an aggravation of symptoms as to constitute a paroxysm, or asthmatic fit. Thus a fresh attack of inflammation (from taking cold, as we term it) on the already diseased and thickened membrane, by producing additional fulness or swelling, renders breathing nearly impossible, leaving no passage scarcely for the admission of air into the lungs, and requiring the utmost efforts of the muscles of inspiration to expand the chest. The difficulty continues (in other words, the paroxysm lasts) till the swelling of the inflamed membrane subsides—an effect which seldom occurs until a copious secretion of mucus has taken place, when the paroxysm terminates, and this is the case in by far the greater number of instances of the disease.

Other causes of an irritating nature produce a similar effect, by increasing the action of the vessels of the part, and consequent fulness, which, though it may not amount to actual inflammation, has all the effect of this while it lasts. Thus, the inhalations of acrid vapours of any kind, will bring on a paroxysm of asthma where the predisposition to the disease happens to be unusually strong, though the duration of the paroxysm in such cases is less than where actual inflammation arises; for this has a determined and most protracted course.

Asthma, therefore, in a great proportion of instances, appears to be a catarrhal affection in its origin, while the paroxysms are brought on by temporary causes of vascular excitement producing fulness and thickening of parts, which continue until the increased vascular action again subsides. The returns of the paroxysms are favoured by predisposition, this predisposition appears to consist in an acquired irritability, the natural and ordinary consequence of a previous inflammation. The suddenness of the attack, in many instances, furnishes no valid objection to this theory; for the same thing may be observed in another portion of the membrane—namely, that which lines the nostril, where, from taking cold, or the application of tobacco, or other irritating causes, these passages become almost instantly obstructed, and are not again pervious until an increased secretion of mucus from the surface reduces the vascular excitement upon which the fulness and consequent obstruction depend; thus affording the strongest analogical proof of the correctness of the theory advanced.

What has been now said applies to by far the

greater number of cases of confirmed or periodical asthma, the paroxysms of which are readily explained upon the ground stated—viz, the temporary increased arterial action in the bronchial membrane. There is, in fact, no necessity for recurring to spasm in order to account for the phenomena of the disease.—*Med. Gaz.* July 14, 1838.

MUSCULAR STRUCTURE IN THE BRONCHIA.

I must confess that I have in vain looked for the apparatus described by Reissessen (of a circular muscular nature) in the smaller bronchial ramifications of the human subject, but their distinct existence in branches of a larger calibre. Some facts already stated by me, and the phenomena of several of the varieties of asthma, lead me to regard as certain the temporary occlusion, by spasmodic contraction, of the larger bronchial ramifications—*Laennec, Diseases of the Chest*, p. 90.

TREATMENT OF PAROXYSM OF ASTHMA.

If the patient can be made to drink by small and repeated portions during the paroxysm, this is sensibly diminished both in severity and duration; the effort of deglutition favouring and producing deeper inspirations, probably by counteracting spasm of the bronchia.—*Ibid.*, p. 102.

In the severer asthmatic paroxysms, it is frequently necessary to have recourse to venesection, in order to relieve the congestion of blood in the lungs, and it is always proper to diminish the necessity of respiration by means of narcotics.—*Ibid.*, p. 165.

MECHANISM OF EMPHYSEMA.

I am now well assured that if we carefully examine the lungs of subjects who have long suffered from dyspnoea, from whatever cause, we shall almost always find more or fewer of the air cells dilated.—*Ibid.*, p. 155.

It has been shown that in dry catarrh the smaller bronchial tubes are frequently completely obstructed, either by the pearly sputa or by the swelling of the inner membrane. Now, since the muscles of inspiration are numerous and powerful, while expiration, on the other hand, is produced merely by the elasticity of the parts, and by the feeble contraction of the intercostal muscles, it must frequently happen that the air which, during inspiration, had overcome the resistance opposed to its entrance by the tumid state of the bronchial membrane and the sputa, is unable to force the same obstacles during expiration, and remains, therefore, imprisoned in the cells by a mechanism somewhat similar to the valves of an air-gun. The succeeding inspirations, or, at least, such of them as are energetic, introduce a fresh supply of air into the cells, and thereby necessarily occasion their dilatation, and, provided the obstruction is of some continuance, the dilated condition of the cells will be rendered permanent. The increased temperature, and consequent dilatation of the air, after it is received into the lungs, will have some effect also in distending the containing cells.—*Ibid.*, p. 160.

SYMPATHETIC ASTHMA.

I have met with one case to which I can only apply the above title. Gooding's child, aged two years (female), near Sidmouth, was brought to me January 13, 1840. She appeared quite asthmatic; the shoulders raised to the ears, and the act of breathing was difficult, accompanied with a loud wheezing; she had

not suffered from fits, and her mother affirmed that the child had always been affected with the complaint (asthma), and she believed that it inherited it from the father, who suffered from it. The bowels being much confined, I ordered some aperient powders containing calomel, one to be taken daily. In the course of four days nine large lumbrici were ejected by the mouth, and three from the bowels. The child became lively and quite well as soon as the worms were expelled.

Obs.—I have met with several cases in which different diseases were simulated through the presence of worms in the stomach, all bad symptoms having disappeared on their ejection by vomiting. I never knew so many brought up at one time as by the child above mentioned.—J. D. F.

IS RHEUMATISM A SPECIFIC INFLAMMATION?

Rheumatism has long been considered a specific inflammation, by which I mean one not presenting the usual phenomena, nor running the usual course of common inflammation.

John Hunter was of this opinion. It has of late, however, been questioned with ability; yet I confess I adhere to the old opinion, and on the following grounds:—

1. The migration to all parts of the fibrous tissue is unique. You see it not in inflammation of any other tissue, nor even in common inflammation of the fibrous tissue.
2. The very slight tendency to suppuration, ulceration, and adhesion, is peculiar; for all these processes are common in ordinary inflammation of fibrous tissues, as from injuries, &c.
3. The perspirations are unique; even the whiteness of the tongue is singular.
4. The excessive buffing and cupping of the blood, sometimes even after the utmost possible venesection, is extraordinary, and seems to indicate something peculiar in the constitution of the blood.
5. Experience shows that this disease is less certainly and uniformly relieved by antiphlogistic treatment than other inflammations.

All these circumstances evince, I think, something peculiar, "specific," in the system, or, if you please, in the vital constitution of the blood, which I believe is M. Andral's opinion.

I have dwelt a little on this subject, not from the love of idle speculation, but because if the inflammation be specific, we are not rigidly bound in the treatment by the ordinary principles of inflammation, if we find them less than usually successful, but are justified in circumspect deviations approved by experience."

Mode of Treatment.

1. The bleeding and purging, or pure antiphlogistic plan.—Edinburgh Infirmary.
 2. The forced sweating plan.—Dr. Gregory.
 3. The stimulant plan, by bark, guaiacum, &c.—Drs. Morton, Fothergill, and Haygarth.
 4. The colchicum plan—apt to produce an intractable dysenteric diarrhoea, if solely relied on.
 5. Calomel and opium plan.—Dr. Chambers.
- It is this latter plan which, with some modification, Dr. Hope has found most efficacious in acute rheumatism.

1st, after a full venesection, or even two in the

robust, but without bleeding in the feeble and delicate, I give every night seven to ten grains of calomel, with half a grain to two grains of opium, according to the age and severity of the case, and every morning a full haust. sennæ to act four or five times at least.

In addition, I generally give the following draught twice a-day, as it appeared to me to expedite the cure, partly, perhaps, by the additional opiate and partly by the sedative effect of the colchicum:—

Colchicum wine, fifteen to twenty drops;
Dover's powder, five grains;
Saline mixture, ten drachms;
Syrup, one drachm.

When the pain and swelling are greatly abated, if not almost gone (which often happens within two days, and almost always within four), I omit the calomel; or if the gums become, in the slightest degree, tender, I omit it even earlier. The opium I continue to the extent of one grain or half a grain at bed-time, and in severe cases I add a grain at noon, for without an anodyne the pains are apt to recur; I also continue the colchicum draught and haust. sennæ as before.

No local treatment is necessary beyond warm or cold applications, according as the patient finds them agreeable.

If the patient is not well in a week, I consider it a case of exception, and the exceptions are generally in those who are subject to rheumatism, and who therefore usually have it in a more obstinate and chronic form.

The advantages of this plan are—

1. That a patient is generally sound, well, and fit for work in a week or ten days after the pains have ceased.
2. That the gums are rarely affected, especially if you previously ascertain that the patient has not a morbid susceptibility of mercury.
3. That it is rare to see inflammation of the heart if the treatment is early begun (I think that one case in a dozen would be the maximum in my practice).
4. If the slightest symptom of endo or peri-carditis does supervene, a few extra doses of calomel and opium, as calomel ten grains, opium one grain, every four or six hours, will generally affect the constitution in twenty or thirty hours, which, with two or three cuppings or leechings on the region of the heart, almost always places the patient in a state of safety. I have never lost a patient by rheumatic pericarditis since I employed this plan, and I have been told by other hospital practitioners that they have been equally successful by the use of calomel and opium.

I have tested this plan by successively omitting the purging, bleeding, &c., and with each omission I have found the recovery less expeditious.

Dr. Hope says that he never met with a case of cerebral metastasis in rheumatism. I have met with a case which I should consider to be of that nature, and which proved fatal.

Israel Holmes, labourer, aged 38, had long been the subject of acute rheumatism at repeated intervals, from which he had often been relieved by venesection and calomel and opium. He was seized, December 1837, with a severe attack of his old complaint, accompanied with intense pain in the head and delirium. He was bled freely, &c., but soon died with every symptom of phrenitis.—J. D. J.