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A TREATISE
ON
The Diseases of Negroes,
&c. &c.



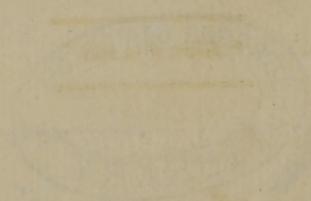
DISEASES OF NEGROES.

AS THEY OCCUR IN THE ISLAND OF JAMAICA.

OBSERVATIONS
A TREATISE

THE COUNTY OF BERMUDA.
The Diseases of Negroes.

By J. G. S.



~~James Thomson~~ *James Thomson*
~~Surgeon General's Office~~ *Surgeon General's Office*
A

TREATISE

ON THE

DISEASES OF NEGROES,

AS THEY OCCUR IN THE ISLAND OF JAMAICA:

WITH

OBSERVATIONS

ON

THE COUNTRY REMEDIES.

BY

JAMES THOMSON, M. D.

~~~~~  
" Aliis, non sibi."  
~~~~~



JAMAICA:

PRINTED BY ALEX. AIKMAN, JUN.

Printer to the King's Most Excellent Majesty and to the Hon. House of Assembly.

1820.

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JAMES THOMSON, M.D.

THE SINGERS OF THE "ALLIANCE" CLUB.

JAMAICA:

PRINTED BY ALEX. ALLEN, 1872.

Printed to the King's Store, Excise and Customs, and to the Hon. House of Assembly.

1870.

TO

JOHN QUIER, ESQ.

T 28 May 151

ALLOW the Son of your old Friend and Partner to prefix your name to a few pages, that contain an attempt to describe the Diseases of Negroes. To your examination, above that of all others, I feel the greatest diffidence in submitting them, sanctioned as your experience is now by a residence and constant practice of upwards of half a century in this island. You will find, however, in every part of them the results of many of your valuable communications and observations, which you have so kindly transmitted.

That you may long continue to enjoy the blessings of health, and be justly styled the Venerable Father of our Profession in this island, is the sincerest wish of

YOUR AFFECTIONATE FRIEND,

JAMES THOMSON.

JAMAICA, SEPTEMBER, 1820.

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INTRODUCTORY REMARKS.

WHILE prosecuting my medical studies at the University of Edinburgh, I was strongly advised by my friend the late Dr. W. Wright, formerly high in the medical department of this island, if my situation in life ever led me to the West-Indies, to institute inquiries into the nature of the disorders to which the negroes are liable, as affording a subject rich with materials. Though he had himself published an edition of Grainger's Treatise on the Disorders of the West-Indies, he was the first to acknowledge its imperfections, and the necessity there was for having a more extended and complete system of medical practice. When I parted from that worthy character to come to this island, he put into my hands several of his manuscripts, which at one time he had intended to make public, but, from the infirmities of age and bad health, he was induced to relinquish this idea. A considerable addition has lately been made to them from the same quarter; and, though in a very imperfect state, they are valuable as containing the observations of one, who, through life, possessed the most discriminating judgment.

I have lost no opportunity, since my residence in this island, that could augment the value of these; and, if health and further experience are afforded me, I will at a future period give to the profession the result of various inquiries, which may benefit those whose fortunes may lead them to this part of the world.

In the meantime I have been advised by many, thoroughly acquainted with the interests of this island, to write a treatise on the more important diseases of negroes, divested of all technical and theoretical language, so as to enable the planter to afford relief with more confidence and success when medical assistance is not at hand, and where it often, I am sorry to say, is not worth having. With these views the following work has been composed. It will remain with a numerous and intelligent class of men, who have the management of negroes entrusted to their care, to decide how far I have succeeded in the undertaking.

My best thanks are due to many who have assisted me with their remarks and advice, but particularly so to Alex. Aikman, senior, Esq. of this island, for the friendly manner in which he favoured me with the perusal of some valuable MSS. in his possession, and other papers, containing much original information on the diseases of the West-Indies.

If the contents of these pages should meet with public approbation, they may chance to fall into the hands of one who is just commencing his career as a planter, or of some medical gentleman, whose practice has yet to be adapted to the constitutions of those resident in a tropical climate: A few observations, therefore, on the habits of the negro race may not be improper, as tending to correct many errors that are prevalent on this subject.

We hear persons, who have never resided among the natives of Africa, exclaim that they are astonished how one can distinguish the individuals, seeing they all have woolly hair, and are of a uniform complexion. The remark, it is needless to say, is the result of the most superficial examination: They are brought from the most diversified regions, and present modifications in stature, complexion, and moral qualities, that equal in every respect those acknowledged to exist amongst the inhabitants of the European continent. In disposition they are represented as base, treacherous,

and revengeful : Alas ! what confidence can we place in those who report the characters of others with so much decision, while in reality they are incapable of discriminating their own.

It would be foreign in this place to enter into a minute description of the moral disposition of this race of people. No one has more opportunities than a medical man of witnessing those scenes that call forth the tenderest feelings of our nature. Professional duties lead us to a knowledge of the most minute domestic arrangements, that are only known to those in habits of the closest intimacy. The endearing appellation of *shipmate*, and the general ones of *brother* and *cousin*, so common with them, are the genuine expressions of a being capable of the most acute moral sensibility.

Some time ago I instituted a series of experiments regarding the differences of anatomical structure, observable in the European and negro, but particularly those of the skin. The result has since been published in England. After various and minute researches, I satisfied myself that, contrary to the common opinion, there does not exist any distinct membrane, that occasions the black colour in the African ; that we cannot shew it by any means that are not artificial, but that in the *coal-black* negro there is a plexus of vessels, which ramify on the exterior surface of the *true skin* ; these secrete a peculiar matter, on which depends the difference of colour ; that, as the shade of complexion becomes lighter, the intensity of this peculiar substance is diminished, until it vanishes entirely in the quadron. By blistering the surface, by the application of boiling water, and by putrefaction taking place, we can detach the plexus of vessels with the colouring matter, and exhibit it in a distinct form ; but a rupture of the connecting parts must have preceded this. And it is from not attending to this circumstance that many anatomists have been led into the error of considering it a peculiarity in the structure of the negro race.

If I might be allowed to hazard a conjecture on the utility of

this substance, I would observe that the increased activity of the cutaneous system deposits a large quantity of secreted fluid on the surface of the skin. Black, from its known powers, not only absorbs, but radiates, more heat than any other colour. The pigment prevents its penetrating deeply, and as the perspirable matter, when about to be elevated in a gaseous form, acquires an increased capacity for caloric, a large quantity of heat is taken up, and the surface kept constantly in a much cooler state than it would otherwise be. I by no means wish to be understood to say, that climate is the cause of this operation. That question remains undecided. It could easily be solved, but it might give offence to many, whose interest forbids them to adopt the results of philosophical investigation.

When we remove the cuticle, after a blister has been used, we occasionally see patches of a much lighter colour than the surrounding parts. From the strength of the vesication, or from the roughness with which the raw surface has been dressed, the colouring principle has been detached from these spots; in the jet black negro it is capable of being regenerated, though very slowly: We have examples of this in those negroes, who have in their own country undergone the operation of having the greater portion of the skin on the brow and forehead removed; they are called here *Brechit negroes*. The cicatrix is quite black; so is also the surface, that covers the part where the mamma yaw has been. The scars of old wounds in such people are also black. This peculiar secretion is liable to disease, particularly on the hands and feet, giving rise to a singular mottled appearance, which is called leopard skin. In the Albino this substance is probably also in a similar state, though dissections are wanting to confirm this conjecture.

As the complexion changes, we find a greater tardiness in parts wounded or blistered in recovering their former state. This may be every day observed in the sambo and mulatto patient.

A weak solution of oxymuriatic acid, applied to the skin for some time, has the effect of diminishing greatly the intensity of the colour, which is only restored after a considerable time elapses: If we detach the membrane, and put it into a mixture of this acid, we destroy the colouring principle entirely, and there remains only a pulpy mass.

It would be attended with little advantage to state all the anatomical differences between the European and negro, which numerous dissections of the latter have enabled me to ascertain. I may only mention that I have universally found the head thicker and heavier in proportion; the facial angle exhibiting the greatest variety; the fore-arm in the generality of cases is by no means longer than that of the European; the print of the foot shews that the arch is much smaller, and the subject consequently less adapted for walking. I have repeatedly analysed the blood, as well in a healthy state as otherwise, and could not detect the least variation.

As to the cause of the black colour in the negro, there is no satisfactory explanation. It does not follow the gradations of temperature. We have light coloured and red negroes, as they are called, from adjoining countries: There are facts to shew that three hundred years have made little alteration in the complexion, where intercourse with the natives has been avoided; why intense heat should produce black has never yet been explained; some ingenious men have affirmed that our *first* parents were black, and that the European complexion is a degenerated state. I should be sorry to think this was true, if it was for no other reason than that the enthusiasm excited by Milton's divine description of our *fair* mother Eve should be shaded by such a ludicrous assertion.

The cutaneous system of the African is in health very active, and from its being suddenly deranged we may date the origin of the greater number of his disorders; in all of them, more or less, their perspiration is attended with a rank, unpleasant smell, which

in some rises to that degree as to become quite insufferable. Repeated bathings have no effect in diminishing the odour. The matter secreted is of an acrid nature, and changes quickly to red a piece of *litmus* paper. It is of very great consequence to attend to this secretion in diseased states of the body. I remember once to have prognosticated a fatal termination in the case of a negro woman, from its suddenly ceasing, though there were not present at the time any very urgent symptoms; in pregnancy it is diminished, and after menstruation ceases entirely, as also in old age.

The importance of maintaining a proper equilibrium in the action of the cutaneous system ought never to be lost sight of by those who are engaged in treating the disorders of negroes. It is of importance not merely in itself, but more so from the immense variety of sympathies, that are called into action when its functions become disordered. The lungs and bowels, from their intimate connection, become the seat of acute disease, attended with fatal consequences; indeed, we can uniformly resolve all the alarming disorders of these people into some sudden disturbance of the equilibrium, which naturally prevails between these great centres of sensibility: Not a moment should be lost in endeavouring to reduce this irregular state by every means in our power. Congestions of the lungs and bowels are most speedily obviated by attacking the diseased organ, and rousing by the most powerful stimuli the sympathetic energy of the external parts. When any morbid activity of the skin is suddenly repelled, it universally falls on some internal viscus, and is manifested by the irritability of the whole constitution. Those, therefore, in any degree aware of the existence of the connection now pointed out, will be enabled, by the administration of judicious remedies, to afford relief equal in every respect to what could have been given, if the patient had been under the care of the most experienced physician.

Another mistake, prevalent with those who are contented with studying nature from the writings of such as are themselves inca-

pable of discriminating her most trivial operations, regards the debilitating powers of a warm climate on the mental and physical constitution of the inhabitants. The African race, in common with others, are by these people designated as indolent, weak, and unhealthy, incapable of bodily exertion; passing their miserable existence in sloth and inactivity.

If we survey the productions of a tropical climate, we find everywhere the most striking examples of stupendous animal organization and magnificence of vegetation. Nature seems throughout to act in the excess of vigour. The quickness of her operations causes a varied scene on each successive day. It is man alone, therefore, proceeding from the immediate hand of his Maker, that is doomed in these trackless regions to suffer misery amidst this general exultation. The impiety of such an idea would form of itself a sufficient refutation, if the facts were not at variance with the opinion of such superficial observers.

The fiercest ray that can dart from a vertical sun is as necessary to the development of the constitutional peculiarities of the African, as the gentle breeze is to the enjoyment of the European climate. Where do we find a more active race of beings than the Arabs? They traverse with unabated speed the wildest deserts, and endure a succession of fatigues that no European durst attempt: The broadly-expanded chest, the brawny shoulders and well-turned limb, which every day present themselves in the person of the negro, are not the attributes of one destined to pass his days in listless inactivity. In a natural state they enjoy an uninterrupted state of health: Many tribes are said not to have in their language a word expressive of *fever*. In all the numerous dissections of the body their viscera have exhibited the marks of unimpaired organization. The glandular system has been remarked as uniformly free from disease. Arguing falsely from the effects of heat on our own system, we imagine that the liver should be found vitiated in structure in the negro: The very reverse is

the case in every examination that has come under my consideration: No overflow of bile is to be found, and the fact is well worthy the attention of those who practise amongst them. On the contrary, I have been assured by those, who have had ample means of judging, that abscesses and other deranged states of the liver are frequent amongst them after a residence in a cold climate. This was found to be the case in many instances with those, who were brought from Nova-Scotia, and allowed to settle in Sierra-Leone, and a general increase of complaints follows a removal to a temperate, and still more so to a cold, climate. How will the sticklers for cutaneous, hepatic sympathy be enabled to shape these facts to their theoretical speculations? Every region on this earth has its own climate, men, morals, and religion. In vain would the ambitious self-love of some persuade us that one system should be common to all. The history of our species might read them a melancholy lesson regarding the millions that have been sacrificed in the prosecution of this fatal delusion; and the feeble progress made in subduing the innumerable barriers against it might teach them how little is to be expected from similar efforts in future: Who could restrain their ridicule if we attempted the development of the infantile mind by means of abstract reasoning and theoretical sentences? Yet we force on the prejudiced mind of the savage the relation of mysterious truths which he never can understand, and preach to him a code of morals that is not connected by a single early association.

The intimate union of medicine and magic in the mind of the African is worthy the consideration of those interested in their welfare, as it exerts the most serious influence in our success in relieving their disorders, particularly those of the chronic description.

It is a sad, yet unquestionable, fact in the history of mankind that, in the early stages of society, wherever we find a profession or calling, that brings with it the influence and approbation of the

multitude, it is occupied either by those in power, or of a more crafty disposition than their fellow-men. The influence of self-love makes them appear to forego every idea of sensual gratification for the benefit of society: By withdrawing themselves from the public, they involve their proceedings in a cloud of mystery, which never fails to bring with it the worship of the vulgar. As the circumstances of situation may vary, they associate themselves with the particular deities of the country, and assume a direct communication with superior agency: The object they desire is equally well obtained in both cases, and the miserable victims of their delusion are alternately subjects to gratify their avarice, ridicule, or revenge.

So completely has the idea of witchcraft gained a supremacy in their minds, that he, who would attempt to destroy it by reasoning with them, would idly misapply the purpose of that noble faculty.

In Africa those that carry on the trade are called *gree-gree men*, and a most lucrative one it is: They dispose of charms to their infatuated patients at an enormous sum. In the West-Indies they are termed *obeah men*, and are regarded with dread and veneration. The artful proceedings of these people (and they are not, as is generally imagined, confined only to African negroes) are at this time most extensive. It is quite a mistake to conceive that Christianity has abolished its influence. The prejudice in their minds is of too early a date to be extirpated by any such common and frivolous ceremony: Medical men have frequent occasion to witness its baneful effects, especially in their lingering diseases. If a stout, healthy negro is suddenly laid up, he ascribes it to witchcraft. He puzzles his memory to find out any misdeed he has been guilty of, and is tormented with a restless anxiety until he has ascertained it: He then consults with an *obeah man*, who fixes on some object of his revenge as the cause of the patient's malady: He is furnished with charms at a great expence, and bound to inviolable

secrecy. What disclosures can we expect after such prejudices have been established? The protracted state of the disease, and emaciated person of the individual, guide us at too late a period to the real nature of his unhappy situation. A change of residence is a favourite remedy, so as to break the spell of enchantment, but too often it follows them with a fatal constancy to the grave. They entertain an idea that nature has no power in restoring health, and that nothing but the strongest medicines can operate a revolution in their favour. The unequal footing, on which a medical man stands regarding their prejudices, promises but little success in the management of their obstinate disorders; and often with disgust is he forced to abandon a plan suggested by his best directed efforts. He has the mortification to see hundreds classed as invalids, who by proper care and perseverance might not only be restored to the enjoyment of health, but prove themselves of permanent utility to their masters.

To obviate the pernicious consequences of these early prejudices, the medical attendant on every estate where they prevail should endeavour in his own capacity to gain the confidence of those entrusted to his care. He should never refuse the gratification of their wishes, when they do not materially interfere with the actual state of disease. He may often derive useful information from the more intelligent amongst them. I must candidly acknowledge that the effects of my most laboured prescriptions have not unfrequently been superseded by the persevering administration of their most simple remedies.

It is the serious duty of every planter to provide a proper person to superintend the management of the sick: He should be above all prejudices and superstitions. Commanding the implicit respect and confidence of the negroes, every experienced person will agree with me in saying that such a character is a blessing to a property.

The midwife is also an important person. She should not be too confident in her own opinion, for I declare I would much rather attend every call, where she stopped her operations from timidity, than witness one case where her interference had rendered my assistance unavailing.

A TREATISE

ON

THE DISEASES OF NEGROES.

FEVERS.

DR. Winterbottom, in his account of the state of medicine in Africa, says the natives have no idea of fever as a general disease, nor any word in their language to express it, but name it from its urgent symptoms as *sick stomach*, *sick head*, &c. In them it is in general the sequel of a debauch, and follows the excessive intemperance in which they indulge at the funeral of their friends. In this island their situation is somewhat different: They are liable to attacks of remittent fever, and to the most fatal of all forms, the low nervous fever.

Idiopathic fever, or where there is no connection with any local affection, is very rare, and it is always of the inflammatory kind, and requires copious bleeding. In pleurisy, as I shall presently shew, from the natural insensible state of the lungs, this fever is apparently an original one, and it is not till some time after that the local symptoms manifest themselves, when we are convinced of our error, which is too often a fatal one, for we have allowed that period to pass during which we could promise any relief.

The appearance of this inflammatory fever, in an uncombined state, is of so rare occurrence, that we should make it a general rule to treat the symptoms at the commencement in the same way as those of pleurisy, particularly if the patient's constitution indicates a tendency to plethora—repeated bleedings, a free state of the bowels, all remedies that act on the surface, all subacid drinks,

of which the natives have a great variety, cupping the temples, and, if the fever is obstinate, a large blister.

Equally rare is intermittent fever. Dr. Curten, a physician at Rio-Bueno, speaking of negroes, says, "I have not met among them with a pure tertian intermittent in the whole of my practice, and those of forty years' experience mention it as a rare occurrence, confined to mulattoes and house-negroes."

In this parish,* during the fall of the year, when the north wind begins to prevail, the negroes have frequently an irregular attack of fever: Not amounting to an intermittent, it is speedily cured by a few doses of bark and bitterwood combined. Women complain of a quotidian, but it is referable to the menstrual state: Those addicted to ardent spirits are much troubled with this fever. The diseased state of the liver and stomach induces it, and the treatment, as will be afterwards explained, must be adapted to the situation of the patient.

LOW NERVOUS FEVER.

This term does not include a complete idea of the disease I am about to describe: Yet, as I am unacquainted with another, it may be better understood when it is mentioned that the symptoms throughout have a strong tendency to putrescence. Although this form of fever is well known in Europe, I have not seen it described by any author, who has written on the diseases of negroes, except Dr. Dazille,† and that in a very imperfect manner. Being nearly unknown to Europeans in a warm climate, it has not attracted their attention. Many practitioners imagine that the diseases of whites, as well as of negroes, are of that urgent nature as to demand bold and immediate treatment. This fatal fever, which fortunately seldom shews itself, might teach them their error. As it is often lengthened to the twenty-first or twenty-seventh day before the patient is out of danger, and requires the nicest discrimination in the timely administration of remedies, lest we interfere with the salutary operations of the system, I shall therefore rather describe minutely the symptoms and diagnostic signs than the mode of treatment, for every one, when he conceives the complaint to have commenced, should send for the ablest assistance.

It may happen that, for some days previous, there may exist

* St. Thomas in the Vale.

† *Maladies des negres.* Paris, 1776.

irregular, cold shiverings, debility, and lassitude, which excite no alarm. More generally the attack commences suddenly, with the most acute pains along the back, and prostration of strength: In one night's time the patient cannot move himself in bed. The countenance is completely altered, the features sharp, eyes glistening, the pain of the head is intolerable, great aversion to light, the arteries of the head throb in the most visible manner, the heart beats violently, the breathing is hurried, and not complete: The fever excites on the surface a burning, *biting* heat, as it has been called, from its leaving a tingling sensation at the extremities of the fingers after they have been withdrawn. The urine is high-coloured, and passed in small quantities. The symptoms, most characteristic at this period of the disease, are the singular deprivation of strength: He is thrown down in a few hours, and cannot move. Also the dreadful anxiety and despondency: He gives himself up for lost, and utters his feelings in a low, languid voice. Towards evening a low kind of delirium comes on: He appears confused, and requires to have the question several times repeated before he can make an answer. There is constant watchfulness, except towards morning, when he doses for a short time. Every symptom now mitigates. After continuing from twelve to eighteen hours, and a crisis seems to have taken place by a copious perspiration, or free evacuation of the bowels, and the urine becoming muddy, as the patient is now extremely low, we have no hesitation in giving bark, wine, and other stimulating substances, with the view of preventing the return of fever. It is not till the afternoon of the second day that we are convinced of the fatal error committed: Restlessness, shivering, and febrile anxiety, with aggravation of every feeling, denote the accession of a second attack. The delirium is much severer, the thirst is irresistible, the heat very irregular over the surface, and moving from one part to another: The tongue and lips are parched, and acquire a thick brown fur, which also covers the teeth: Articulation becomes extremely difficult and inaudible: The patient is constantly muttering to himself. These commotions, after a certain time, subside. A cold, clammy sweat succeeds, affording no manner of relief. The subject is sunk to the lowest degree, has irregular startings, with frequent syncope, on the least exertion. After the second or third accession of fever, it is seldom that we can observe any regularity in the progress of the disease. The remedies used have been of that

active kind, that we can no longer distinguish the salutary movements of nature from such as are excited by artificial stimuli: The returns of fever are irregular: As the patient gets weaker, they are repeated every three or four hours with diminished violence, and when we least expect them. An interval of considerable duration may intervene from the application of a well-timed remedy, and, when we flatter ourselves with hopes of recovery, debility beyond the power of medicine suddenly supervenes, and the most powerful stimuli fail to excite the smallest return of sensibility: The parts rested on or blistered mortify, and the exhaustion is such that the transition from life to death is imperceptible.

Such is the progress of this fatal fever. Let us now attend to those appearances that may influence our opinion in prognosticating the termination.

This is the only fever in which critical days and critical evacuations are distinctly marked. Compared with the European, the pulse is much more moderate during its course, and the salutary operations of the system are much less easily effected, and for the most they terminate in a considerable deposition of matter on the aponeurotic expansion of the body.

The fever usually terminates on the eleventh, fourteenth, seventeenth, or twenty-first day: If it passes this last, the treatment has been ill-directed, the forces of the system have been unable to produce a favourable crisis, or a deposition has taken place on some important viscus.

The fourth day of the fever announces what will pass on the seventh; that is to say, we are enabled to judge of the tendency of nature to any particular evacuation. Thus, if the accession of fever on the fourth day is not very severe, and the pulse pretty equal, we may hope for a resolution of the disease on the seventh by means of perspiration: If the bowels are more than usually distended, and there be intermission of the pulse, nature indicates that it will be by the bowels; and, if the urine be disturbed on that day, and the pulse unequal, it will be through that channel that a salutary operation will proceed.

All evacuations by sweat or stool that happen before the fourth day, and bring with them no relief, are pernicious, and indicate a severe disease, and a termination on an unfavourable day.

The seventh day does not afford any means of judging of what

is to happen on the eleventh: The operations of nature have by that time been too much interrupted by active medicines.

If, on critical days, the urine becomes thick, and deposits a sediment, which remains for two days, we may pronounce the subject out of danger; but if it is thick at the onset of the disease, and afterwards becomes limpid, or turns so after a critical evacuation, the prognosis is fatal.

Delirium early in the fever, and invading suddenly with inflamed eyes and beating at the temples, is unfavourable: Not so, if it comes on gradually, unless attended with profuse sweats and frequent pulse. Gradual deafness, without delirium or fierceness, in the progress of the fever, is favourable; a glazed, fixed appearance of the eyes in the intervals of fever is bad. If there is constant watchfulness, moderate pulse, and turbid urine during the first days, we may predict a tedious case, and very often sudden, unexpected death. The stronger the fever is at the commencement, without endangering life, the speedier and more marked will be the crisis.

If the tongue is of a high red colour, or suddenly loses that fur characteristic of this fever, there will be a fatal termination. Early diarrhœa, which gives no relief, should be checked, and if the matter passed is black, accompanied with delirium, there are no hopes.

It is a maxim in most fevers that, when early delirium comes on, we must suspect the cause to be in the bowels: It would be highly dangerous to act on this principle in the present form.

Every one of a weak, relaxed habit of body is liable to this fever. Women who have produced many children, and those labouring under great mental agitation, the age of puberty, when the physical powers of the body are suddenly excited, and the important process of menstruation not thoroughly established, are particularly obnoxious to the attacks of this insidious disorder; and, according to their previous habits and constitution, the type will assume more of a malignant or nervous character.

Before proceeding to the treatment requisite in this fever, every one should be convinced of the truth of the following observations before he administers the simplest remedy:

That, contrary to the general opinion entertained of tropical fevers, the powers of the system will operate the most effectual and salutary changes in removing the fever, which no efforts of art can

imitate. Negroes, in particular, having no confidence in nature or her operations, in defiance of our utmost exertions, give the strongest stimulating substances in the very first stages, in order to remove that apparent debility, which creates so much alarm. When this fever has once established itself in the constitution, no mode of practice can cut it short, and all our endeavours to remove it by an artificial crisis are highly pernicious. To watch attentively (after removing the more urgent symptoms) the tendency nature has to produce a critical termination ought to be our sole operation: She must be assisted by the mildest and gentlest means, and the relief afforded by her efforts on critical days most carefully noted. If the symptoms, during the febrile accession, are too violent, they must be moderated, especially on the fourth and seventh days, which are the most critical ones. If, in the intervals, the powers of life are endangered by too great a debility, mild stimulant applications are warranted in gradual succession.

If we are called in an early state, although the symptoms be urgent, we should seldom or ever have recourse to the lancet, without first weighing every circumstance in the constitution of the patient: Very seldom is it necessary. A gentle emetic of 15 grains of ipécacuanha, or one of tartar emetic, provided the tongue is loaded, along with 10 of antimonial powders, may be requisite, drinking freely of vervain tea, or other country remedies, to promote a perspiration. If there is irritation at the stomach, the effervescing mixture, saline draught, toast and water, mint tea, with peppermint, may be tried. After the operation of the puke, a purge may be given. A mixture of Epsom or Glauber salts, with nut-oil, is excellent, and operates easily. Strong purges are to be avoided. After having fulfilled these indications, we should not be too anxious to urge the use of further medicines. Many push the sweating system to an extreme degree, but after the fourth day it only debilitates the patient, without forwarding the operations of nature. In fact, every thing that is given to excite a discharge in the early state, unless it agrees with efforts of the system, aggravates the febrile disorder.

In the first intermission of fever, we should avoid the fatal error of exhibiting bark and stimulants; it is better to wait for a short time, and observe the course nature means to pursue, than interrupt her operations by injudicious practices: Draughts, composed of nitrous ether, with sweet spirits of nitre, or hartshorn, mild

drinks, with weak brandy and water, and towards night paregoric, are amply sufficient at this period; if a second attack of fever ensues, with delirium, we must exert every measure to subdue any untoward severity; sponging with vinegar and water, binding the head with fresh cooling leaves, plenty of acid drinks, and ripe fruits.

It is during the second intermission that medical assistance becomes of importance. I could enter minutely into the subject, but the application of that assistance requires so much knowledge and experience as to exert the judgment of the ablest practitioners. Repeated blisters and cataplasms, mulled wine, brandy, or old rum, with ether, camphor, opium, and hartshorn, are now particularly valuable; every hour that we can sustain life increases the chances the patient has of recovery; this should never be forgotten; Pills of carbonate of ammonia and wild cinnamon or pepper are requisite;* the bowels must be moved by clyster or oily purges; the thick fur, already mentioned as adhering to the teeth and tongue in this fever, is no indication of the necessity for active cathartics; we may sink our patient by such a proceeding beyond recovery. It is astonishing, even in an advanced stage of this fever, how the strength is recruited by the patient's being carried into the open air, and allowed to enjoy the refreshing breeze. Bark, in every form, is absolutely necessary when the symptoms after a few days become remittent.

PLEURISY, &c.

I have generally found a most erroneous idea to prevail amongst those who have the charge of negroes with regard to this disease. They look on every sudden attack, attended with cough and difficulty of breathing, as denoting inflammation of the lungs, and re-

* Take carbonate of ammonia or smelling salts, one drachm; camphor, half a drachm: Make into twelve pills, one or two when there is great debility.

Take strong bird pepper, one drachm; camphor, one scruple; powdered wild cinnamon, one drachm; oil of peppermint, ten drops: Form into convenient sized pills, three or four occasionally when low.

Aqua ammonia, nitrous ether, of each a tea-spoonful, to be taken in a glass of strong mulled brandy.

Infusion of bird peppers, a wine-glassful, aqua ammonia, a tea-spoonful.

Camphor and opium may be combined in a variety of liquid forms.

quiring immediate and copious bleeding, without respect to other symptoms. If this error merely regarded the name of the disease, it would be of little consequence, but unfortunately the life of the patient is most materially involved. I shall therefore point out the proper distinctions that should be kept in view, so as to enable every one to call in the timely assistance of those who, by their experience, are more enabled to afford relief.

Pleurisy, strictly speaking, means an inflammation only of the pleura or serous membrane that covers the ribs internally and the surface of the lungs. *Pneumonia* means an inflammation of the substance of the lungs themselves, with or without the pleura. It will sufficiently answer all practical purposes, if we consider both of these modifications as one disease, and under the name of pleurisy.

It commences with rigors, succeeded by strong burning fever, affecting chiefly the face and palms of the hands, difficulty of breathing, which is so great as to threaten suffocation; at other times the patient says he could breathe, but that an acute pain suddenly catches him in the chest, which makes him desist; the anxiety is great, as is expressed by the countenance and restless state of the body; there is a short dry cough; occasionally expectoration of blood, or bloody mucus; there is a thumping pulse, which to the feeling much resembles the vibration of a tight musical string under the finger; the pain may be fixed, so that the finger can be placed on the spot, or general, so as to be referred to no particular part; tongue white and slimy, urine high-coloured, and passed in small quantity. If the disease is not taken in time, the symptoms increase, till a fatal hemorrhagy follows, or water is collected. More generally the fever abates, and rigors, with a sense of fulness, denote the formation of an abscess in the lungs, that bursts, and terminates the life of the patient.

This acute disease attacks those of a robust, plethoric habit of body, and of the sanguine temperament. Hence it is more frequently met with in men than women, in those seasons when sudden alternations of the weather prevail, and their duties lead them to be exposed to the night air.

Such negroes in the prime of life do not know what sickness means. They are ashamed to complain, and, when we add to this the natural insensible state of the lungs, the disease has often got such a footing, that they only refer to the seat of their complaint

after the symptomatic fever has increased the sensibility of the lungs to a morbid degree: In this situation they present themselves to those who, arguing from their former uniform state of health, are not aware of the increasing danger. A negro of such a disposition ought never to be refused admission into the hospital; They will not always at first avow their disease, and, from their uninterrupted state of good health, they are more apt to ascribe their symptoms to witchcraft. They have no notion of their own situation, and make vague answers to the most important questions.

I have mentioned that the pulse feels hard and throbbing; it is so in most cases; but, when the disease has come on gradually, it is not universally so; the system is oppressed, and the pulse only rises after very copious bleeding; the debility is apparent. These circumstances render pleurisy a much more fatal disease to negroes than it would otherwise be.

Our first inquiry should be to discover the nature of our patient's constitution, his previous habits, if he has recently been exposed to the vicissitudes of cold and heat, the exciting causes of the disease. If we are satisfied of the existence of these and other circumstances, we should lose no time in detracting blood, and that with no sparing hand. If the veins are small or deep seated, it is preferable to open one or both of the jugular veins, and allow the stream to flow from a large orifice. On this much of our success depends. The finger should be kept constantly on the artery at the wrist during the operation. This I would particularly insist on, if the pulse has been previously oppressed. To a person, not of the medical profession, the favourable change will convince him that he is acting with propriety, and allow him to proceed more boldly in his mode of treatment, and no medical man ought to despise the assistance it may render him. The appearance of the blood and the change of symptoms must guide us in our future operations. Immediately after the first copious bleeding a strong purge of neutral salts, with James's or antimonial powders, should be given, and plenty of mild mucilaginous drinks, but by no means have recourse to blisters. If we are called in the early stage of the disease, this is too common an error. If we cannot subdue the disease by other means, we shall have too much occasion to trust to them at a future period. If, after leaving the patient to the efforts of nature for seven or eight hours, we find the pulse to augment, the pain and other symptoms not relieved, the vein must again be

opened, and the same, or a larger quantity, withdrawn. The blood previously taken should be inspected, and if the surface is concave, white, and contracted, we may proceed with more freedom in the second operation, though the direction may appear of little consequence, we ought to receive the blood in separate vessels, each not holding more than an ordinary tea-cupful. It is astonishing what a difference is found in the contents of the various cups, which would not be observed if it had been in one mass. The extent of depletion is quite uncertain, and, when pushed to any length, should always be under the direction of a proper person. I have in several instances within sixty hours taken away eighty ounces of blood from a robust negro, and saved his life. After the second or third day bleeding becomes very dangerous, and by many is altogether interdicted, yet where the febrile anxiety remains distressing, it may be resorted to in a modified form.

If, after repeated bleedings, we have reduced the pulse to a quiet moderate vibration, and the other symptoms are relieved, we should trust a good deal to nature: We have done every thing in our power, and the various preparations of emollients and pectorals will be but of secondary assistance. Nature, or the powers of the constitution to restore health, is what very few trust to, especially in warm climates. The negroes have an idea that they never can recover, without an immense variety of remedies being administered. In this they are, as in many other things, mistaken. The West-Indies is a climate similar to their own in most respects, and it would certainly be an anomaly in the all-merciful goodness of Providence, if this extensive race of beings had been left to the unopposed malignancy of disease. The case, however, is far otherwise, and, if we are not too proud to learn, we may, from attentively watching the slow though certain operations of the system, have a mode of practice pointed out to us, which theory would never have taught us. From the intimate sympathy that subsists betwixt the lungs and lower extremities, we should endeavour by every means to excite the action of the latter, so as to remove the violent congestion that has taken place in the thorax. It is characteristic of this disorder, that the limbs become cold and benumbed, which generally proves fatal. We should lose no time in applying blister to the calves of the legs, cataplasms of pepper and mustard, and the constant repetition of the warm bath, and flannel clothing, to excite free perspiration.

After having subdued the inflammatory symptoms, the only hopes we have are that nature will resolve the disease by a crisis: This she generally effects by means of a copious expectoration of mucus, which we too often interrupt by the premature and hurtful administration of our numerous boasted pectoral compositions. During the second and third days we may venture on the following mixture,* and, as the symptoms of fever, &c. are generally aggravated towards night, at bed-time, if they be repeated, with any mild mucilaginous drink, to allay the cough, which interrupts a refreshing sleep, and induces a return of the irritation, repeated warm fomentations to the chest are of great service before we use blisters, though in general they are but little attended to: They may be composed of a bath made from any bush the negro may have a fancy for: They should be continued for one or two hours at a time, and changed the moment they become cold.

If, towards the close of the second or beginning of the third day, we find the more urgent affections mitigated, yet there remain difficulty of breathing, local pain, and irregular returns of fever, the pulse and appearance of the last drawn blood in such a state that we can urge that evacuation no further, then a large and powerful blister may be applied to the side of the chest most complained of, previously sprinkling some *tartar emetic* on the surface of it, so as to ensure a more certain vesication. The inhalation of the steams of warm water, with sweet spirits of nitre, should be diligently persisted in, adding any simple bush that may be supposed to act on the lungs.

If the disease is to terminate by expectoration, it generally appears on the fourth or fifth day: We may then assist nature with all our preparations. Nurses and learned old men are at liberty to produce their boasted chronicle of cures and certain salvation, descended through a long train of ancestry; they resemble the greetings of women and children bestowed on the warrior who returns with victory; they are pleasing as marks of affection, and more so from the recollection of what has passed. Those mentioned † below may prove useful at this period.

* Spirit of Mindererus, half an ounce; laudanum, 20 drops; mucilage, so as to form a draught.

† Cowfoot leaf, boiled up with honey; the young calabash, roasted, and mixed with syrup; lignumvitæ, with a few drops of laudanum; the syrup of tolu balsam, with gum ammonia, squills, &c. may all be used, according to the inclination of the patient.

I again repeat the caution regarding the use of strong purges in this disorder. After the first, which ought to be powerful, if there is occasion again to move the bowels, let it be done by oily medicines or enemas: When expectoration is about to commence, a drastic purge may not only defeat the intention of nature, but sink the patient beyond the hopes of restoration. When this disease terminates unfavourably, as by the formations of *tubercles* or *vomica*, the symptoms and treatment become so complicated as to require the best medical advice: I have therefore omitted the description, as foreign to the nature of this work.

PERIPNEUMONIA NOTHA, OR BASTARD PLEURISY.

I have endeavoured in the preceding pages to give the description of a disease, whose symptoms are so acute as to enable every one to act with promptitude and vigour. That I am about to mention is of a very different nature. It has not been accurately described by any author on the diseases of negroes, so far as I know of, and at this time is quite misunderstood by the majority of planters, and only known to those medical men who have witnessed its rapid and fatal progress. Unfortunately for the patient, it is generally confounded with pleurisy, to which, at the very commencement, it bears some resemblance, but, in other respects, is of the most opposite nature. It is this disease which is alluded to, when we hear those exclaim, who ought to have known better, that they were astonished, considering the urgency of the symptoms, the patient could not stand bleeding, but sank after the first operation.

The patient may have laboured for some time under cough and difficult respiration: Without claiming any particular attention suddenly in the night, or after any unusual exertion, the breathing becomes so laborious as to threaten instant suffocation. No position gives relief: The shoulders are drawn up towards the ears, and the knees to the chest: The anxiety is indescribable: The face is swelled as well as the neck, and the countenance of the negro becomes of a dark *copper red*. The respiration is at-

tended with a rattling noise, but there is no expectoration, and little cough: Fever is much less than in the former disease. The patient eagerly grasps the hand, and piteously prays for relief in an almost inarticulate whisper: The pulse is soft, and unequal in strength: The tongue shortly gets a thick, dark, mucous covering: No particular part is complained of. The cheeks are often cold, and other parts of a burning heat. The most marked symptoms are the sudden prostration of strength in the negro, anxiety, and despondency. These symptoms include the more usual mode of attack: They vary, however, from the nature of the subject and severity of the disease in elderly women. About the cessation of the menstrual period they come on gradually, and uniformly terminate in water in the chest.

In many instances, from its prevalence at a particular period, it has been said to be epidemical, accompanied with a remarkable tendency to putrescence: This is doubtful.

Those who are deceived by the apparent symptoms of inflammation, and proceed at once to let blood freely, and give strong purges, have too often to witness a fatal termination. The lungs become every hour more and more oppressed with fluid, till suffocation puts an end to the patient's sufferings: This has led many to call the disease in the West-Indies *Humoral Asthma*.

The subjects that suffer most are those of a weakly, bad habit of body. Women who have borne many children, and particularly those with whom menstruation is ceasing, dirt-eaters, young children, and all at an advanced period of life, and who have at any time been subject to pulmonary complaints.*

The dissections of bodies I have made of those negroes who have sunk under the disease have been numerous. I have uniformly found effusion of a viscid matter into the cells and substance of the lungs and bronchiæ, attended with partial inflammation of the mucous membrane; in some places, abscesses with bloody matter.

* In the MS. writings of Dr. Wright, formerly an eminent Physician in this island, I find the following remarkable observation, which I have often seen verified, though not to the extent he mentions:—

“I have very often seen in the West-Indies among negroes difficult, quick breathing, with bad expectoration; fever, and other frightful symptoms of inflammation of the breast, take their principal rise from quantities of putrid bile and other sordes lodged in the primæ viæ, and often also from worms. An immense discharge of one or the other will take place suddenly and give instant relief, leaving the Doctor and his blisters quite in the background.”

When the patient lingered any time, water was found in the cavity of the chest and abdomen, and in some instances in the brain; so that, whatever may have caused the disease, the mode of termination was nearly alike in all.

When we are called to prescribe for a patient under such symptoms, we are often much puzzled in what manner to act.

The fever and difficulty of breathing suggest the idea of inflammation, but the state of the pulse, fluttering and unequal, does not agree.

If, after considering the present and previous habit of the patient, the mode of attack, &c. we may be warranted in drawing away a few ounces of blood, then tie up the vein, and form our prognosis from it when coagulated; should it be watery and loose, we have not a moment's time to spare.

A large blister may be applied to the chest on one or both sides; a strong oily cathartic, mixed with Epsom salts, given; warm fomentations to the chest and feet. The numerous class of expectorants will show themselves of little advantage in such a case, if we place too much confidence in them; our chief hope rests upon the effect of local stimulant applications to the lungs themselves by inhalation; warm water, vinegar, sweet spirits of nitre, ether, turpentine, fumes of strong spirits, smoke of the benzoin and myrrh, may be variously mixed and drawn into the lungs: Perseverance is required; and the degree of irritation should be carried as far as possible. Yet, to avoid coughing, wrapping the throat with flannel, impregnated with any of these substances in a warm state, is strongly recommended; there is a constant inhalation; keeping a phial of ether open in the room will also assist.

If we had proper apparatus, many of the gases might afford great relief.

We must also assist the patient with other remedies. *Digitalis* (fox-glove) promises to be of great utility here. In the West-Indies it is unfortunately the case that we can never depend on the efficacy of this medicine, or of squills, certainly two of the most powerful we know of: They may be exhibited in these forms;* the

* Powdered fox-glove, one grain; squills, one grain; powdered cinnamon, with soap: Made into a bolus; to be taken morning and evening.

Tincture of fox-glove, fifteen drops; oxymel of squills, one drachm: Morning and evening.

Dried squills, three grains; *asafoetida*, ten grains: Made into pills; to be taken during the day.

squills act by determining to the skin, a thing to be constantly kept in view in this disease, but the effects are very problematical.

What we look on as a crisis in this complaint is the formation of a favourable expectoration. We are too apt to hurry on the natural process by stimulating medicines; one of these is gum ammoniac; this should never be given till expectoration is fairly established, as below.*

We are to keep in mind that a fever, with a putrid tendency, accompanies this affection in the majority of cases; the critical evacuation by expectoration must therefore be most carefully distinguished from those by perspiration and stool, which come on at a latter period, and are the salutary efforts of nature to dissolve the fever; the progress of each must be marked; a strong purge given incautiously will instantly stop the expectoration, and be followed by death; if the bowels are not so free as we would desire, it is preferable to delay any medicine till the spitting is well established.

If the matter coughed up is thin and frothy, and gives no relief to the symptoms, we may prognosticate great danger; still more so, if it resembles pieces of rotten spleen, thick, and of an offensive smell; this termination is frequent in Jamaica, and always fatal.— If the disease does not yield, and there be no indications of a favourable crisis, symptoms of a putrid nature become manifest, indicating speedy dissolution, we are forced to have recourse to bark in every shape, especially in the form of a glyster; small doses of squills may be joined with the bark, to obviate its effects in the expectoration: Wine, snake-root, and other stimulating remedies, must be freely given; the camphorated julep, made with vinegar, ought in this stage never to be omitted.

If the disease puts on a remittent form, bark becomes highly necessary.

Blisters to the tops of the shoulders have a most singular effect in relieving the congestion of the lungs; the garlic prepared in this form† is highly extolled by many; the balsam of tolu with honey.‡

D 2

* Gum ammoniac, two drachms; one pint of boiling water; rubbed gradually in a mortar; strain; add oxymel of squills, half a drachm; honey, six ounces; laudanum, one drachm: A spoonful frequently, to promote expectoration.

† Take three fresh roots of garlic, sliced across; five ounces of honey; three of vinegar; swim a cup with this in a bason of boiling water for one hour: A table-spoonful of this occasionally, with a little brandy.

‡ Take four ounces of balsam of tolu; a pint and a half of cold water; allow to boil in a vessel of water for twenty-four hours; strain, and add as much syrup, honey, or other ingredients, so as to make it pleasant; This is justly celebrated as a pectoral.

A vast number of emollient pectoral preparations may be made up, and given very freely as auxiliaries in the recovery of the patient; the negroes repose great faith in their virtues, especially if recommended by their own *Doctors*, and we should never refuse their admission, after we see that the disease is likely to have a favourable termination.

INFLUENZA.

Like all epidemics, this disease exhibited various degrees of morbid affection; a slight febrile attack, heaviness of the head, watery eyes, and cough, which hardly incapacitated the patient from his ordinary pursuits, and terminated by a critical sweat on the second day, was the simplest form it assumed: Many white people had it in this manner.

In the healthy and vigorous constitution it was introduced by chilliness, succeeded by fever, a rapid, but not full, nor regular pulse, extreme thirst, a sense of stricture in the throat, with hoarseness, and soreness in the part, which, when inspected, appeared very red; the breathing laborious and anxious, the expectoration small and viscid, with very troublesome efforts to evacuate it, and of a dirty yellow cast; from the nostrils and eyes a thin discharge, which incrustated as the disease advanced; the countenance was bloated, and the light unpleasant to the eyes; bowels costive, urine high-coloured. In the robust subject the incipient inflammatory stage was violent and rapid, and it usually lasted from twenty-six to forty hours: If bleeding and other remedies had not been used in time, the debility became so great as to render it inadmissible; the pulse feeble and irregular, the patient seldom complained of pain, but the senses were impaired, with delirium at night, a rattling noise, with ineffectual efforts to expectorate; the matter from the nose got darker; a remission of fever would be followed in a few hours by a paroxysm severer than the previous ones, with wanderings; the horizontal position created a sudden sense of suffocation, and the attendants were obliged to raise the body. Death happened generally on the fourth day. With children the symptoms were most fatal and distressing: Unable to explain their

feelings, the hurried and convulsive movements of the muscles, the uncountable pulse and constant fever; showed too plainly the rapid progress it was making. They refused all medicines, and left us little else than spectators of their untimely fate.

But those that suffered most were people advanced in life, and particularly so if they previously had been liable to pulmonary attacks. The type was milder; and thereby threw us off our guard. Many complained of acute pains in the shoulders and limbs, as if they had been beaten, with sudden stitches in the side, impeding respiration; the anxiety was singularly severe, and accompanied by a degree of *nervous irritation*, which produced tremblings all over the body; the breathing was quick and imperfect, with a rattling noise, but little expectoration, frequent fainting fits, and cold sweats; the state of the pulse varied every half-hour, and the fever was irregular; the countenance much bloated, sometimes also the lower extremities: In such cases life was extinguished from the accumulated fluid, which interrupted the circulation of blood through the lungs. In many instances the negroes dropped down dead while complaining to their master. The insensible state of the lungs and insidious nature of the complaint had caused effusion, before they were aware of their danger.

Baffled in the seemingly best directed efforts to conquer this fatal epidemic, I anxiously had recourse to a view of the parts after death, as the only certain mode of obtaining a knowledge of the means requisite to stop its ravages.* I have opened between forty and fifty bodies of negroes that fell a sacrifice during the different epidemics, and must say that I have obtained that kind of information which has enabled me to prosecute a plan of treatment with much more confidence, I should mislead if I said with much more success. These dissections rather go to prove that the effects of irritation on such delicate organs are rapid and extensive, and put at defiance any feeble relief that may result from the remedies we oppose to them. In children the throat, windpipe, and lungs showed evident marks of increased action; the trachea was in several cases seen to be covered with a distinct membrane, like what occurs in croup, though not of so fine a consistence; the lungs universally redder, and water in the chest in small quantities; where the head was opened there appeared several spoonfuls of

* These dissections were made by a physician who witnessed three epidemics in this island.

water in the ventricles, and the brain being removed, it ran out from the spinal canal when the subject had been vigorous, but sank in spite of our exertions; the bronchiz were choked with a thick viscid matter that adhered like bird-lime; the vessels and substance of the lungs had every indication of congestion, without ulceration, and when cut into showed blood, mixed with air; adhesions of a recent date were found; the heart flaccid, and the coronary blood-vessels distended with blood, their internal coats of a deep scarlet colour; the pericardium had more or less fluid, and so had the two cavities of the chest; pieces of the lungs sank in water when tried, and resembled the liver more than any thing else; the other viscera generally sound. In these patients, where early assistance had not been given, the thoracic viscera were in a state of incipient gangrene from inflammation; mucus of a darkish colour and offensive smell, and water in the chest. With those advanced in life, and where the debility from the beginning had been such as not to warrant bleeding, the appearances were much less varied; the matter secreted was of a thin watery consistence, the lungs pale and flaccid, and in such a state that one might thrust his finger into any part of them; the veins, gorged with blood, of a pitchy nature; the right side of the heart enormously distended, with loose conglua; fluid mixed with floating lymph was never absent, and the pericardium full of serum; when the head and abdomen were examined, water was always found there. The general result of these numerous dissections which I have now stated will, I trust, enable us to understand the fatal nature of the derangements in this disease, and the great care and discrimination required in suiting our practice to the various constitutions of patients. As to the variety of opinions regarding its nature, whether epidemic or contagious, it is of little consequence to determine in this place: As an apology for ignorance, most say it depends on an *epidemic constitution* of the atmosphere, and, when you ask what that means, they gravely tell you an *epidemic constitution* of the atmosphere, and there they very wisely leave you to your meditations.

The prognostic to be formed depends on such a variety of circumstances, that I think it better to omit it altogether than give an imperfect one.

The view which we take of the nature of influenza will contribute much to direct our treatment; *the nervous-irritation*, with

which it is combined, is a remarkable fact, and has not attracted that attention it deserves from the influence it exerts over the life of the subject; early congestion, with a tendency to decomposition, is discoverable in every case. These two facts are important, as they prove the origin of the disease to reside in the nervous system itself. The irregular pulse, sudden debility, appearance of the blood, want of acute pain, and state of the parts after death, shew the action to have been one *sui generis*; very unlike pleurisy, which, in a great measure, is under the command of the lancet. I appeal on the present occasion to those professional men, who are conversant with the admirable productions of Doctors Plouquet, Clutterbuck, and Baillou. If the analogy is not very striking in the history of the dissections they give of fever, attended with great nervous irritation, and those recently mentioned, most important viscera were found in a state approaching mortification, and complete congestion, yet during life we had no reason to suspect that such extensive injury was proceeding, being marked by no symptoms of inflammation. Late experiments by an eminent physiologist prove the powerful influence the nervous has over the sanguiferous system. Many years ago in England, I satisfied myself also of their intimate relation by numerous trials on the living subject. The action is quite peculiar, and unfortunately bleeding will not put a stop to it, as the fatal issue can too often testify.

Cure.

In our indications of cure we should therefore ever keep in mind, that the slightest degree of inflammation in such delicate organs should not be allowed to go on unrestrained; the central and principal function of the system is interrupted, and rapidly followed by congestion, which hurries the patient to the grave. When the person is of the robust constitution I have already described, and is attacked suddenly, and we see him early in the complaint, bleeding is the first operation; I always prefer small quantities at a time, and frequently repeated, to the free evacuation some make use of; the state of the pulse is no guide here, it *varies every half-hour*, the strongest faint during the operation. The blood drawn varies in every cup, and that is one strong reason why it should be taken away in small quantities; the jugular vein is preferable to the arm, and the patient cannot see what is withdrawn. The temporal artery is still better, and in cases where there is a necessity for

losing blood, but we are prevented by syncope, any quantity may be obtained without being followed by the disagreeable accident;* the extent of depletion cannot be fixed by any directions, but depends entirely on the constitution of the individual. The general plan of always ordering blood-letting, until a medical person arrives, is the most injurious thing possible, and attended with fatal consequences. The purge next to be administered should not be strong, a mixture of Glauber and Epsom salts or nut oil, with eight grains of antimonial powders, or fifteen grains of James's powders by itself, with plenty of sage-tea, fomentations to the chest, and mild diluent drinks; frictions of warm spirits and turpentine all along the neck and back; the legs should be placed in water as hot as can be well borne, and kept there for a length of time; the vapour bath is a good addition, followed by strong, stimulating frictions. If, after waiting some time to see the effects of this treatment, a gentle perspiration comes out, the bowels answer freely, and the expectoration increases, we shall have little further trouble; but if debility, dyspnoea, and fever persist, we must lose no time; the practice of giving repeated doses of medicines that excite nausea, and determine to the skin, is highly pernicious after the first or second day; I have already explained myself on this subject when treating of pleurisy. We see nature occasionally terminate by a critical sweat, and we vainly imagine that our coarse imitation will do so likewise. How often do we see the patient flooded by sweat, and every symptom existing in its most aggravated form! When the skin is dry, small doses of Dover's powders, Mindereus' spirit, or antimonial wine, if judiciously given, are valuable. Stitches of the side and difficulty of breathing must be opposed by blisters to the chest; one a foot long and four inches broad, placed along the back-bone between the shoulders, I have always found highly serviceable; it seems to stimulate the origin of the nerves that are so greatly deranged in this disease.

It will evidently occur to every one that the local means recommended in the *bastard pleurisy* (page 24), as it is called, must prove of great advantage in such cases: It is on these I am inclined to place the greatest reliance; they act on the termination of the

* The buffy coat will not appear in the first cup, but in the second; the rapidity with which the blood is drawn, the size of the orifice, the length of time the vein has been tied up, and, more than all of these, the degree of nervous irritation, will influence the coagulation.

nerves and secreting ducts, and stimulate them to proper action; a sponge, moistened with aromatic vinegar, should be constantly kept to the nostrils, and the alternate use of every substance previously mentioned should be most diligently persevered in; also the stimulating expectorants. Mercury is a favourite with many, so as to excite salivation; they say that none die after the mouth is affected; the truth rather is, that few will die if they live to that period, whatever their treatment may have been. We had better, therefore, not trust the life of our patient to the doubtful chance of having a salivation raised. Every medical man must acknowledge the utility of mercury, from its peculiar action on mucous membranes; given as an alterative, combined with squills, it should seldom be omitted; it will reduce that thickened state, which remains after inflammation, and probably prevent a relapse, which is both common and fatal.

If we are correct in our opinion of this disease, we need not dread the inflammatory symptoms, nor the use of opium in an early stage. It is particularly indicated in this epidemic, from the great nervous irritation that exists. I have ever experienced the best effects from it, given both in a solid and liquid form, combined with other antispasmodics, and that to a considerable extent.*

If we have occasion to relieve the bowels at an after period, it must be done by clysters of a stimulating nature; † strong purges sink the patient very suddenly. When the powers of life are low, we must apply the strongest external and internal stimulants we can command; but the sensibility is often so completely gone, that they do not differ in their operation from so much cold water.

When the disease had gone on for some time before it was observed, or the patient was of a weakly or elderly constitution, one was greatly perplexed in what mode to proceed; the debility forbade any strong evacuations, and the dyspnoea threatened instant suffocation. Our only rational mode of proceeding was to stimulate the action of the vessels locally, as I have already pointed out; expectorants, and every remedy that could sustain the activity of the

* Opium, four grains; camphor, ten grains; asafoetida, half a drachm: Made into pills, and given during the day.

† Forms.

system; but the accumulation of fluid was so general and rapid, that little could be hoped from any exertions.

DYSENTERY.

This is a very common and fatal disease amongst the negroes. From the sudden alternations of temperature and their mode of life, the equilibrium, which I have already mentioned as existing in the action of the external surface and that of the intestines, is readily overthrown, and followed by severe and extensive derangements of that important part. It assumes every degree of severity from the simplest to the most malignant form. In the mildest state the person is suddenly attacked during the night with severe griping pain and commotion in the bowels, a frequent desire to go backwards, without being able to pass any thing, or, at most, a little mucus, tinged with blood, which varies in quantity; there is thirst, parched skin, and faintness; urine generally scanty. If taken in time, these symptoms soon cease, and nothing remains but a discharge of mucus, which they call *white flux*.

In the more urgent form there is sudden and great prostration of strength; in fourteen hours the stoutest negro is scarcely able to help himself; anxiety is great, nothing but pure blood is passed, sometimes to the extent of one or two quarts; the tormina are incessant; by obeying every inclination to go backwards the parts become excoriated, and a prolapsus of the rectum increases the miserable sufferings of the patient; one fainting fit succeeds another, and death unexpectedly happens on the third or fourth day; when protracted, every evacuation is putrid in the extreme, and he cannot be approached without the greatest disgust.

The causes of this loathsome disease are numerous—obstructed perspiration, from alteration of temperature, unwholesome food, noxious exhalations: When it prevails epidemically amongst negroes, there is a peculiar constitution of the atmosphere: Though a common opinion, I believe it to be an erroneous one, that pears and other fruits are the chief cause of this disorder. A diarrhoea, as I shall afterwards show, is the means by which nature gets rid of a surfeit produced by these substances: This, from neglect or bad

treatment, may assume a dysenteric form, but that is merely accidental: The pear season and the epidemic constitution generally coming together have caused the error now alluded to: Those who partake freely of fruits have been preserved from the attacks of the disease.

I have examined the bodies of many who have died of this complaint, and uniformly found the mucous or internal coat in a very diseased state, inflamed to a great extent, covered with bloody mucus, very seldom any ulceration; the liver seldom or ever diseased; the other coverings of the intestines more or less affected; frequent large collections of worms, of the round kind. I have rarely met with *scybalæ* or small hardened pieces of fæces, so common in other varieties of dysentery.

In my examinations of the healthy structure in the negro, I have always found a much greater proportion of mucus secreted in the internal surface of the intestines. This I conceive to be a provision of nature to guard against the effects of those sudden revulsions unavoidable in a warm climate. The number of blood-vessels that ramify on the interior must be greater, and from this we can explain the vast quantities of pure blood which many pass without being in great danger.

These and other considerations have led me to look upon this epidemic as extremely different in its nature from the dysentery of Europeans. With them dissections show an opposite state after death. The increased morbid activity of the liver, and its vitiated secretions, require a mode of practice quite peculiar; the quantity of mercury administered would never suit the constitution of the negro. With the latter it is a complete *catarrh of the intestines*, and this should be constantly kept in view in our treatment of it. The following remarks may guide us in judging how the complaint will terminate. Young women in the prime of life suffer much less than men. This I have had confirmed by many experienced practitioners. It may be owing in some measure to the activity of the uterus; children have it milder; but with women after the menstrual period has ceased it is fatal.

Blood passed at the commencement in considerable quantity, followed by mucous stools, with a relief of symptoms, is favourable.

Blood late in the disease, if it appears a second time, is bad.

Worms passed upwards or downwards are favourable,

A red tongue with severe tormina is dangerous.
 If the tongue becomes foul during the progress of the disease, a remission may be looked for.

Thirst, with a remission of pain, is good.
 If a warm perspiration breaks out after faintness, the complaint will abate.

Delirium is always fatal, especially with severe purging.

Severe tormina at an advanced state indicate the retention of fæces.

If there is great debility, and a saline oily purge produces a free evacuation, we may hope for a change, though late in the disease.

Cure.

The indications of cure are obvious to mitigate the increased morbid, mucous secretion, and excite by every means in our power the strong sympathetic action of the intestinal canal. When the subject is seen early, a puke should precede every remedy, 15 or 20 grains of ipecacuanha, with a copious allowance of warm drink. Dr. Grainger speaks highly of the gamboge or yellow thistle, when no other emetic is at hand. I can speak very favourably of its effects, and the safety of its operation. A drachm and a half bruised in half a pint of boiling water, and allowed to cool, will answer every purpose; and may be repeated if required. I have witnessed excellent effects also from a table spoonful of mustard, powdered and mixed with warm water. I would prefer this on many occasions to every other, from its peculiar salutary actions on the intestines as a purge. I have constantly made use of the following in preference to every other at the commencement.* By being gradually exhibited, we obtain copious stools, and relieve the tormina; the jalap in this country is seldom to be trusted to, and, when combined with other remedies, acts violently on the intestines, already too irritable. At night, if there appears a want of due activity on the surface, Dover's powder† may be used, with copious draughts of warm vervain and ginger tea.

* Beat up four raw eggs, with Jamaica pepper, or wild cinnamon cod, five drachms of Epsom salts, and four table-spoonfuls of cold drawn nut-oil, with sugar: A wine-glassful of this every hour, till free operation of the bowels, using freely mucilaginous drinks.

† See forus of medicines at the end.

The warm bath must never be omitted, with long and repeated fomentations to the belly. We should particularly enjoin the patient not to yield to every slight call, but to restrain the inclination, as he will thereby not only have much pain saved him, but obtain a more complete evacuation. Negroes are very apt to indulge in this way; they keep straining for hours, so great is their anxiety to get rid of the disease.

If next morning we find the bloody evacuations to have diminished, and the mucous discharge established, the patient will soon recover, and gentle astringents, with mild nutriment, will perform a cure; the repetition of the saline oily purge is, however, generally necessary; sago, arrow-root, flower pap, mulled Port wine, with Jamaica pepper, or wild cinnamon, opiate draughts at bed-time, and gentle clysters, are all that are required. This is a statement of the sufficiently simple mode of proceeding in the more common cases we meet with.

If our efforts to cut short the disease are not successful by the third or fourth day, it is in vain that we persist in the use of those substances that determine to the surface. Our plan must be altered, and our attentions devoted to the removal of the more urgent symptoms, directed by long experience.

The great exhaustion and frequent stools lead the attendants to use opiates, stimulating food, and astringents of the strongest kind. At an early period of the disorder this is almost certain destruction, and it is by far too common a practice with the natives of this country; after the second or third day it is impossible to procure natural evacuations without the use of laxatives, the intestines being in that morbid state. The virtues of toasted rhubarb, so much trusted to and boasted of, I have ever found to be a weak, trifling medicine, and absolutely hurtful in the early stages; besides it is seldom that we can procure it fresh in this island; repeated small doses of ipecacuanha, with chalk powdered, followed by the saline oily purge, gives great relief at the commencement. If there is great irritation at the stomach, we must not attempt strong emetics nor purges; draughts of chamomile-tea or mustard and water, weak broths with an opiate, and a blister to the stomach, clysters with an opiate, will often answer our purpose on this occasion.

When severe griping, frequent scanty stools, with spasms of the intestines, and cold clammy sweats, with hiccup, continue to annoy the subject, we must have recourse to opiates, combined with cam-

phor,* or in a liquid form. Medical men entertain a great dread of the effects of opium in this disease; this may be very proper where there exist hardened fæces and fever, but in the negro race we have no reason to apprehend any such things, or at least very rarely—many is the miserable hour I conceive I have saved my patients from its liberal use, particularly in solution as now mentioned; it is astonishing the relief they experience from it; when spasms and debility, after the operation of a purge, have reduced them to a low state, sitting over the steams of warm water gives ease to the severe tormina; clysters of any mild mucilaginous substance. A late writer has extolled greatly the effects of ipecacuanha in that form. In the first stages I have repeatedly tried it,† and with evident success; a blister to the abdomen, when the pain is severe, is absolutely necessary, as is also the use of a tight bandage, and frictions of strong spirits and camphor.

When the disease from the beginning shows, as it frequently does, a putrid tendency, we must avoid the use of all strong purges: Manna, sweet oil, but particular clysters, are indicated; a solution of aloes‡ will prove of service. Many in this state give bark along with the saline purge, and after a few evacuations commence the bark clysters, mixed with sweet oil and laudanum; snake-root, wild cinnamon, the pepper infusion,§ Madeira wine, mulled brandy, must not be withheld; when great debility cataplasms, warm turpentine, frictions, and blisters, are all to be employed alternately. When hiccup comes on, and we conceive the patient to be in the lowest possible state, it is astonishing how much relief is felt from a copious alvine evacuation; so far from sinking he hourly gains strength, and ultimately recovers. After the worst symptoms of dysentery are over, the alvine excretion is very often still kept up by the irritability, which the viscera have acquired during the disorder, and the tendency of the humours to these parts; the belly is puffed, and the former symptoms threaten to return after using

* Take six grains of opium, as many table-spoonfuls of cold water, rub the opium in a mortar for ten minutes, pour off the top part and strain; a wine-glassful of sweet spirits of nitre may be added: A table-spoonful of this mixture to be given when spasms of the bowels severe. See forms of medicines at the end.

† Three drachms in a quart of water, and boiled down to a pint, may be repeated twice during the day, when the stools are offensive.

‡ Aloes pounded, two drachms, dissolved in warm water: Starch, as much as forms a clyster.

§ Bird-pepper, bruised and infused, may be swallowed in Madeira wine.

the least exertion; small doses of rhubarb and ipecacuanha, with opiates, will remove these; the bowels must be strengthened by every means in our power, and the country remedies are here peculiarly valuable; the most dangerous period being passed, they assist in restoring the former healthy action, but are by no means of material consequence in curing the disease, as many conceive, and are highly pernicious when given in too early a stage; such as act by their mild lubricating qualities are sago, flour, arrow-root, the leaves and seeds of the vanglee or zezegary, emulsion of the cocoa-nut, ochra seeds, and the like.

As gently astringent, toast and water, with elixir, vitriol, parched rice and water,* guava buds, and fruit, also the pomegranate, with cinnamon and Port wine, infusion of Jamaica pepper, and bruised country pepper, logwood decoction, lime-water, with a solution of cashew gum, white vitriol; † lime-juice and salt is a favourite remedy with many; ‡ chalk mixture and cinnamon when clysters are required. The above substances may be combined as suits the inclination. Opiates should be added. Each clyster should never weigh more than half a pound.

As tonic compositions, the contrayerva, § cocoon antidote, the adrué, || bitterwood, tincture of steel, Jamaica bark, and many others.

The recovery in this complaint is extremely slow, and relapse follows the least irregularity; the bowels retain a morbid, irritable state, which is affected by every change of weather; a tight bandage, three or four times twisted round the belly, proves of great support, so much so that the Turks, from long observation, say it prevents an attack of the disease; warm clothing, particularly on the feet, must be used for a length of time; this direction negroes are very negligent of, and relapse, which happens from it, terminates in water, which collects in the belly; the appetite is voracious in some cases, and if not restrained they will devour such a mass of victuals at one meal as to induce a return of every bad symptom, and it passes through them in an almost undigested state. Let them eat little and often, with high-seasoned dishes, well prepared;

* Forms at the end

† Ditto.

‡ Ditto.

§ Ditto.

|| Ditto.

all old salt meats are to be avoided; the bowels must be kept open by small doses of rhubarb, and all the stimulant class of aromatics the country produces. The continuance of bad stools with griping pains, want of appetite, and emaciation, shew that the internal coat has become diseased, or ulceration taken place. We should lose no opportunity of getting immediate assistance, as a long course of remedies must be tried and directed with no common skill.

DIARRHŒA, &c.

This disease and dysentery are so connected that many consider them as modifications: The one frequently terminates in the other from bad treatment, and other causes. The former differs so far, that it seems to consist in irritation, not amounting to inflammation, in the muscular coat of the intestines, which hurries the contents through in an irregular manner: There is no fever, no blood, mucus, nor tormina; the stools are of a watery nature, and consist of dissolved fæces, which are passed with much flatus.

In speaking of dysentery, I have alluded to the common mistake most persons fall into in supposing the *avocado pear*, and other fruits, to be the causes of that disease; it is far otherwise. At the commencement of a sugar-crop, I have seen one half the negroes affected with looseness for a few weeks. Indeed the inconsiderate nature of some of these people is such, that when the returns of the season bring with it any new production, they absolutely gorge themselves every day until the novelty wears off; any thing eatable, which they can obtain *free of cost*, is voraciously swallowed, until such a mass has accumulated, that it is surprising the intestines do not burst: Nature, however, is extremely kind to these creatures, and a spontaneous diarrhœa carries off the offending materials, and, unless the subject interferes by using astringents, no danger is to be apprehended: When we suspect the presence of crude acrid ingesta in the stomach and bowels, a smart emetic, followed by a purge, and an opiate at night, will answer every purpose. Lime-water, with cinnamon and the cashew gum solution, is a good restorative. If obstructed perspiration cause the irritation, *Mindererus' spirit*,

antimonial powder, sage, vervain-tea, with the warm bath, and the use of an opiate, will be sufficient. Diarrhœa from teething should not be checked unless severe; strong purges in every case are contraindicated.

CHOLERA MORBUS.

We seldom witness this disorder amongst negroes. Excessive vomiting and purging, but not of a bilious nature, ensue from eating poisonous fish, crabs, and other substances. It is somewhat singular that the poison of fish is deposited in the liver, entrails, and fat. If these be separated, the remainder may be eaten with safety. *Salting* destroys the most poisonous fish: The black-backed sprats, which are in general very injurious, if laid one night in salt pickle, may be eaten with safety: Fish are poisonous at certain seasons, and not at others. The fish found in the West-Indies to be most deleterious are the barracuta (*pecca major*), king-fish (*xiphias*), cavallee (scamber), rock-fish (*pecca marina*), smooth bottle-fish (*ostracion glabellum*); the yellow-billed sprat in particular is to be dreaded, producing convulsions and sudden death. The large white land-crabs, when they feed on the leaves of the Manchineal-tree, are productive of violent cholera in a few hours; I have known people break out into large *wheals*, and a yellow suffusion to take place universally over the body, which remained for several days. All fish without scales, and of a very large size, are suspicious. The cause of the poisonous quality is quite unknown; the longer the fish remains out of the water, the more virulent does it become. The idea of copperas banks is too ridiculous to merit mention; the weakest solution of that mineral causes instant death to all fish. Many judge of the poisonous quality by giving the entrails to dogs and fowls; if it does not injure them, they deem it safe; this is dangerous. What will act severely on the human species has often no effect on them, and *vice versâ*. Parrots' bones, for instance, mashed up and given to a dog, will excite convulsion and raving madness; the negroes are well aware of this. Sheep eat the Manchineal apple with impunity; and parsley is a deadly poison to

parrots. The test of placing a silver spoon in the pot where the fish has been boiled is equally to be distrusted.

When we are convinced of the subject being poisoned, an emetic of the strongest kind must be given. Sulphate of zinc, fifteen grains, is the best, followed by an oily purge, and plenty of diluent liquors. Negroes have great faith in strong peppers with rum, and with good reason. If vomiting is severe, opiates and clysters.

Dr. Wright highly extols the virtues of salt and lime-juice: It should therefore never be omitted in our plan of relief. The stomach and bowels remain long in a state of great debility, and consequently require constant attention. White people who have suffered will find it necessary to visit a cold climate, in order to restore their wonted vigour.

C H O L I C.

Negroes are greatly troubled with these pains in their bowels. With some it amounts to symptoms that resemble the *dry belly-ache*, but this last disease is totally unknown to them in any severe form: *Dram-drinkers* and *coppersmiths* have been found to have attacks of it, and opiates are requisite in the first stage, before any purgative, to remove the constipation. These cholicky pains became habitual, and invade suddenly, with vast commotion in the bowels and eructations. The sole and favourite remedy of negroes is Cayenne pepper and lime-juice, and it fulfils every purpose. When there is constipation to any extent, an opiate and laxative clyster give great relief, with warm fomentations. The various preparations of aromatic stimulants are afterwards most beneficial.

PAIN IN THE STOMACH.—INDIGES- TION.

Much caution is requisite to distinguish real from pretended complaints. It is an expression with the negro for any disorder,

and none is more familiar to the ears of the planter. The disposition of the subject, and his appearance, are our chief guides.—Pleurisy, I have already said, invades in this insidious way, and diseased liver shows itself by the same symptoms. We cannot get a clear explanation of the case, but are left greatly to conjecture. The pit of the stomach is pointed out; breathlessness in walking up an ascent, bad appetite, and swelling of the stomach after food; vomiting, and the food taken passing quickly, and in an undigested state; bowels irregular, and countenance of a pale, sickly colour.

The spleen is rarely the cause, the liver much more frequently, especially if the negro has been given to the practice of dram-drinking; the strength of the spirits more than the quantity is what injures so materially the coats of the stomach, and the liver is invariably involved; a hardness may be felt below the ribs when a full respiration is made; pain extending along the right side to the shoulder; bowels very costive, and light-coloured stools.

An alterative course of mercury, with frictions to the side, is the only remedy, with whatever improves the functions of digestion. The induration has commonly proceeded so far that dropsy of the belly is the fatal consequence. I have remarked in another part of this work that negroes are more liable to disease in cold climates. They are extremely subject to abscess of the liver in Europe, a thing unknown in Africa. If the patient is a female, the above symptom must be referred to obstructed menstruation, or to their final cessation: This I shall treat of afterwards when on the diseases of females. Worms lodged in the upper part of the intestines and stomach create appearances of a similar nature to those now mentioned. After various applications we are surprised to find a fit of sickness and vomiting expel by the mouth several of these in a living state, the patient gets immediate relief, and we can direct our future treatment with more confidence. Should the case turn out to be one of mere indigestion, from the presence of acid in the stomach, a gentle puke, with thirty grains of rhubarb, afterwards the chalk mixture, and the favourite pepper medicine of the negroes, will be sufficient. Chalybeates and bitters are also proper in the cure.

DIRT-EATING.

This is one of the most serious complaints connected with a de-
 ranged state of the stomach and digestive organs.

The countenance and complexion become so changed, that the
 disease is obvious at first sight; the colour, from a deep black, ap-
 proaches a dirty light brown, or lemon yellow; the skin feels rough,
 is dry, and cold to the touch; the white of the eye of a dusky yel-
 low; the eye-lids puffed, face bloated and dejected; the gums
 lose their red colour, are pale and flaccid; inside of the lips and
 tongue nearly white; the hair loses much of its colour, and acquires
 a lighter shade; there is a constant, uneasy pain at the stomach,
 attended with nausea and vomiting; the pulse grows weak, small,
 and contracted; the heart beats in a troublesome manner on the
 least exertion, and the pulsation is felt over the upper part of the
 abdomen; the large vessels of the neck throb violently and visibly;
 the mesenteric glands get enlarged, and cause the belly to swell;
 the feet are bloated, and finally water is effused either into the
 chest or abdomen, which terminates the life of the wretched in-
 dividual.

The various kinds of earth they eat have different effects; the
 white clay, when burnt over a strong fire, is not nearly so pernicious
 as the others; the great absorbent power it is possessed of
 prevents serious injury; in time, however, it operates in an equally
 fatal manner; the streaked clay, containing a mixture of red and
 white earth, is the most speedily fatal, and it is generally swallowed,
 so to speak, in a raw state. I have known negroes, who had the
 craving sensation in the stomach, continue the practice for a long
 time, without any visible injury to their health. They, however,
 selected a species of earth, which experience had taught them to be
 possessed of a highly absorbent quality.

The opportunities I have had of examining bodies, where the
 subject had died from this custom, have been numerous, and for
 the sake of example it should be made a general rule to open the
 body of every one who falls a sacrifice to it.

The stomach is found enlarged, the coats thickened and whiten-
 ed, but the glands were not in any instance that I recollect diseased.
 I have preserved many specimens of portions of the stomach of such

subjects, in order to prove that the disease does not necessarily depend on any disorganization of this organ. The liver is generally paler, flaccid, occasionally hardened; the bile of a thin, watery consistence; the glands of the intestines enlarged and hardened; the veins unusually distended with blood, which, when analysed, was found to have proportions very different from those of persons in health.

In our prognosis, and treatment we must be entirely guided by the particular circumstances which attend each case.

In those instances where there is original disease in the abdominal viscera, external appearances, exactly resembling those attending dirt-eating, are found to prevail, and we are apt to accuse a poor wretch of this abominable practice, when in all probability he has no idea of it. This requires proper discrimination, and to be made by a professional person. The great uneasiness caused by the disorganization of any of these viscera begets a desire to swallow substances, that may afford temporary relief; hence most of the above-mentioned subjects resort to dirt-eating, as giving partial ease. It soon grows upon them, and, when combined with the previous malady, invariably proves fatal. When the existence of such a case is ascertained, the patient should be removed from every means of procuring his favourite antidote, and an alterative course of mercury, with other suitable remedies, immediately entered on, and persevered in for a length of time. By this means we may save the life of a valuable slave, who would have soon fallen a sacrifice to this unhappy propensity.

When dirt-eating occurs in women, it has been compared to the *chlorosis* or *green sickness* of Europeans. The comparison is quite erroneous. They have little or no analogy in reality. Green sickness is a complaint, for very obvious reasons, almost unknown amongst young negro women; and the remedy is obvious to every one. Women, who indulge in this dreadful custom, soon lose their monthly period; and hence the effect has been mistaken for the cause. When the monthly evacuation ceases at the natural period, from the uneasy sensations, some ignorant Guinea women, by the ill advice of their *seniors*, adopt this practice as the mode of relief, and of recalling what nature can no longer support; the continued use of the *contrayerva* bitters, with steel drops, occasional smart purges, and exercise, will generally remove the consequences attendant on this critical period. These are preferable to the ad-

ministration of mercurial preparations, always dangerous at that time of life.

It is a common practice with negro women when pregnant to have small cakes of baked earth, which they eat when troubled with eructations or acidity at the stomach: They do not conceal it, but look on it as a privilege of their peculiar situation. Acidity does certainly prevail to a great extent in pregnancy, and hence the cause of their using it with seeming impunity, but it should always be strictly prohibited. The power of imitation in children is so strong, that they adopt the custom without being aware of the effects.

When children take to dirt-eating, the cause should be most strictly inquired into, and from this alone the manager is often enabled to stop its further progress. Should it arise from a bad disposition, if not too far gone, the subject must be made to work, and confined at night in a room, with a wooden flooring and ceiling; frequent pukes may be administered; small doses of *asafœtida*, *tar-water*, *ley-toddy*, made of salt of tartar; some give *warm cow's urine* every morning till it pukes; repeated doses of a weak, warm solution of salts are safe; animal food should be offered regularly, and a proper person should see that it is eaten twice daily.

The other children on the estate should be taught to hold the subject in abhorrence. I would always recommend that every one who dies of this practice should be opened, and the body not allowed to be given to the friends for burial, but interred in some spot, as a warning to others. The dread they entertain of this I have known from experience to work more beneficial effects than the sum of medical prescriptions. Mercury should always be rejected in the case of children; the consequences are speedily fatal; there is no remedy I can specify as being particularly indicated as an antidote to this abominable habit; the prudence and experience of every planter will guide him much more efficaciously than any medical assistance. Formerly whole gangs of newly-imported negroes resorted to this custom with the most fatal consequences, particularly those of the *Angola* country. Now-a-days it more frequently originates from *mélancholy*, *revenge*, *obeah*, *dissatisfaction*, *unhealthy climate*. In such instances all our efforts are unavailing; the subject obstinately refuses to confess his propensity, and sinks in spite of every assistance afforded him.

Change of residence to a lowland situation may be tried, and

particularly a sea-voyage. With adult negroes the most frequent cause of their being addicted to dirt-eating is the temporary relief given to the melancholy, attendant on the idea of their being under the influence of witchcraft. The extent to which this prevails is still great, and much less attention is given to it than it deserves. Most entertain the opinion that Christianity will remove it entirely, but witchcraft was invented long before Christianity, and the practice of it is much more suited to the savage mind than our refined notions of morality. Can it be expected that so simple a ceremony (for that is the sum of their religion) is to do away with traditions and superstitious practices, descended through ages, the constant companions of their youth, and associated with their earliest recollections? The charms are irresistible, and, when the designs of wicked men bend their influence to personal interest, no power on earth can do away with the impression.

GONORRHŒA, STRICTURES, &c.

I forbear entering here into any argument as to the identity of gonorrhœa and chancre, and whether the system, by the matter being absorbed, may not become constitutionally affected. The question has exercised the ingenuity of many medical men in lengthened discussions, which are only adapted for those who have made them their study.

I shall defer any remarks on lues venerea till I speak of the constitutional disorders of negroes, and their treatment. Here I shall merely describe the common gonorrhœa or clap, so frequently met with, and which, in my opinion, is never productive of any constitutional disease.

No certain rule can be laid down as to the time a clap will take to make its appearance after infection has been conveyed. It is most usually perceptible in the space of from four to twelve days, and begins with itching, soreness, discharge of whitish matter, heat of urine—these increase; the desire to pass water is frequent, and extremely painful; the matter is more copious, and thinner; the penis swells, and sudden painful erections cause the most excruciating torture; blood may be voided in small quantities; the testicles

are swelled, and small hard swellings form in the groin, which occasionally suppurate.

If the complaint is not irritated by any irregularity of the patient, nor prolonged by want of timely assistance, in the course of about a fortnight or three weeks the discharge, from having been thin and discoloured, will become thick, white, and of a ropy consistence, and gradually cease entirely with every other symptom. On the contrary, if the inflammatory stage has run high in a robust habit, with intemperance, use of high-seasoned food, and neglect of proper remedies, the running continues for many months, and ultimately leaves a gleet, with strictures in the urethra, which impede the free discharge of urine, causing it to be passed in a divided stream, or by drops, with bloody mucus.

The rambling life, in which most young negroes indulge with regard to sexual intercourse, renders them extremely liable to gonorrhœa in every form; and the shame they attach to its discovery is the cause of serious aggravation. They have recourse, after using their own means, to the assistance of those who form too numerous a body, by promising to perform a quick and certain cure. Strong astringent injections from the first, pills of mercury, so as to induce salivation, constitute their chief means of relief. The patient, dreading detection, keeps at his work, though labouring under the greatest debility; and too often it is not until matters have gone beyond any remedy that the true nature of the case is disclosed. Negroes have a pernicious custom of constantly handling the parts, which, when joined with the *unnatural* length of the *foreskin* in many of them, causes severe inflammation, that ends in adhesion, and prevents cleanliness, of all things the most requisite in this disorder.* Many negro boys have a trifling habit of pulling forward their foreskins, and even of tying knots on them. At that early period little injury is felt, but, when the genital organs are developed at

* As to the practice of circumcision, it is without doubt a most abominable and indecent custom, and only fitted for the vilest and most degraded of our species. Many defend it on the principle, that in a warm climate the *foreskin is naturally longer*, and requires amputation; the fact is unfounded, and could only have originated from the most partial observation. Those acquainted with the mere elements of physiology will agree with me in saying, that it is injurious to the work of propagation, and of course contrary to nature. If it were to be practised in a warm climate on the eighth day, as the Jews do, cases of locked jaw would more frequently happen: This is not the only instance where physical facts are at variance with the mysterious and superstitious prejudices of our deluded species.

puberty, thickening and contraction are found to have taken place to such a degree, that the skin cannot be drawn further back than the point of the penis. When young negroes have connection with women in this situation, irritation to a great extent follows; a constant discharge from beneath the foreskin takes place, and, being unable to reach the parts from whence it originates, ulceration and sores to a great size are formed, with a general inflammation of the glans penis, which, unless speedily obviated, terminate in mortification. This diseased state of parts is very often met with in negroes, and they generally entertain such an aversion to any operation, that we are compelled to insist on its being done. A simple incision in many cases will prove sufficient; at other times circumcision is absolutely necessary. Introduce a director, and, with a pair of sharp-pointed scissors, at once divide the foreskin to the extent required; then, with a scalpel and forceps, cut round each side; the *frænum præputii* need not be divided: When the bleeding ceases, the skin should be retracted, the parts carefully cleansed, and any sores dressed with tincture of myrrh and laudanum, then replaced, and dressed with a piece of fine rag, spread with terate dipped in a mixture of myrrh and laudanum; the penis is to be tied up with a bandage; the urine to be made seldom; the second or third day matter will form, and considerable swelling ensue; bathe the surface with warm milk and water, and nature will soon perform a cure.

Many negroes entertain a most *destructive* opinion, which is of African origin, that, by having connection with a sound woman, they will get rid of the disease; the consequences of this idea are seriously extensive, and therefore it should be made a general rule, and strictly observed, to keep such people in confinement, in separate rooms from the women, during the period of their cure.

Treatment.

We should keep in mind that when the infection has once taken place, it ought to have its natural course, and that the only things to be dreaded are gleet and strictures. It is the practice of some, who aim at popularity, to attempt the cure at its first appearance: By stimulating and astringent injections the discharge is often speedily suppressed; but the consequences are such as should make us cautious how we trust to its efficacy.

Injection of sweet oil and laudanum, cold washing of the parts,

gentle purges, mucilaginous drinks, ochra-tea, barley-water, cashew gum solution, with milk, young buds of the cotton-tree, the zeze-gary, &c. Many order nitre-tea, when there is heat of urine, which is erroneous, for it not only increases the quantity of urine, but also the irritation on the inflamed or excoriated urethra. Sitting over the steam of warm water, frictions of camphor and opium, with sweet oil—these are necessary at this period. If there should be swelling of the penis, and also in the groin, cold poultices, mixed with sugar of lead or nitre, are to be frequently renewed; a suspensory bandage to be worn, and perfect rest; an opiate of fifty drops of laudanum, and an ounce of camphor mixture at bed-time; the use of mercurial ointment to these sympathetic swellings in the groin is not advisable; cold applications are much to be preferred. After the running has persisted for several days, and the thickening matter and inflammatory symptoms abated, we must alter our plan, and have recourse to local stimulating remedies, in order to prevent the formation of a gleet. Those recommended in the article injection (see forms of medicines) may be tried; they must be thrown up at least six times daily, if we are to expect any service from them; great attention should be paid to this operation; it should never be left to a patient himself, unless he has had much experience: We may order day after day the strongest injections, and be surprised that they produce no change; the cause will uniformly be found to arise from the careless manner in which they are used. The patient, with the thumb and two fore-fingers of both hands, should hold the penis in the position of half-erection, gently stooping, and the operator, applying the syringe steadily, throw up the contents. A sense of coldness near the seat of the rectum will tell the patient if the liquid has gone up properly; it should be retained a few minutes before urine is voided. The balsam of capivi twice daily, the Canada balsam, pills made of hog gum, lime-water, a pint daily, with cashew gum solution, are usually joined as internal remedies, and with good effect. It is seldom this disease resists the continued application of these remedies very long, otherwise we may begin to suspect the existence of a previous infection, the formation of strictures, or a general bad habit of body. In the latter case, the Peruvian bark, the Lisbon diet drink, stomachic medicines, cold bathing, frequently changing the nature and strength of the injection, or a mild alterative course of mercury, with opium and camphor,

should be had recourse to, and continued for some time. If, from mucus mixed with blood, and the urine being passed irregularly, we suspect the presence of strictures, a small-sized bougie, smeared with sweet-oil, should be introduced, previously bent to the shape of the passage, and held a few seconds before the fire. No force must be used; the patient placed against a wall in the standing posture, the body gently bent forwards; he is very apt to faint if it be the first time a bougie has been passed; this must be guarded against; if no resistance is experienced, gradually press until only an inch is left; keep it in that state three or four minutes: If, on withdrawing it, indentations are perceived, or it is twisted and bent back on itself, the existence of strictures is indicated; but there are so many sources of fallacy, that the opinion of a professional person should ever be required.

The spasmodic state of the urethra and neighbouring parts will often excite violent spasm, so as to prevent the passage of any substance; previously injecting a solution of opium, sitting over the steam of warm water, are necessary in that instance. Sometimes the introduction of a bougie for a few days will remove all discharge, and any tendency there may be to the formation of strictures. The bougie should never be passed quite into the bladder, after the *first trial* to ascertain the seat of the disease, but only carried a small distance beyond the stricture, and worn for half an hour at each introduction; the size must be gradually increased, but not too rapidly; the practice should be persisted in for a length of time, and, if the least return of obstruction again appears, a renewal is necessary. When, from the long duration of the disease, even the smallest bougie cannot be made to pass, the caustic one is our only remedy. It would, however, be improper in a popular work of this nature, if I mentioned any thing regarding the application of this powerful, but dangerous, means of relief, which should never be entrusted but to the hand of the most skilful. When the introduction of a bougie does not indicate the presence of stricture, a long course of remedies has produced no visible effect, and the patient's health is declining from a constant watery discharge or weeping, attended with severe and constant pain of the back, we may safely infer that the disease is not altogether of a local nature, nor to be treated by local means. There is a remedy, which acts both in a constitutional and local manner, and although not much employed in this part of the world, has been proved, by the experi-

ence of the ablest practitioners, to be a safe and efficacious medicine, when prudently administered, particularly in gleet of long standing. It is the *tincture of cantharides*, which ought always to be used as prepared by the London apothecaries, merely from its uniform strength. Fifteen drops of this may be given three times daily in cold water, and gradually increased to half an ounce in the day: The moment any heat or irritation in making water is perceived, it must be stopped for a time, and if necessary renewed afterwards.

If the tincture of steel, Peruvian bark, and other stomachics, are combined, and we are not anxious to augment the dose too rapidly, a change will soon be evident in the general state of the system, and the discharge will rapidly diminish. The extent to which I have seen this drug given in England, and the beneficial results, from very great experience, enable me to speak in the most decided manner as to its superior powers, and to regret that so little advantage has been taken of it in the negro practice of this island. I will enlarge on its utility when treating of ulcers. Excoriations and superficial ulcers on the *glans* are frequent concomitants of gonorrhœa; when alternating with swelled testicles, and a renewal of the discharge or intermittent fever, strictures are always the cause, and these must be removed before they will yield; otherwise a solution of opium, calomel, and lime-water, or any astringent application, will be sufficient to perform a perfect cure.— In women the disease is of a much milder nature, and frequently confounded with *leucorrhœa* or *whites*.

Astringent injections, lime-water, cold bath, &c. are proper, but, when the discharge does not proceed from any organic disease of the female parts, the tincture of cantharides will restore the natural and healthy action. The means recommended to restore the strength of the digestive organs are requisite here; a Burgundy pitch plaster, or one of hog gum to the back, a tight bandage worn round the loins, will prove serviceable. The early sexual intercourse women have in warm climates renders them liable to this obstinate complaint, which is not unusually followed by a prolapsus of the womb and schirrus, with abortions. That form of the venereal disease, attended with *chancre* and buboes, is extremely rare amongst negroes; indeed, I have the testimony of some old experienced practitioners in this island, wherein they mention that, during the course of many years, they could not remember ever

having seen a case of it. Late experiments at home render the use of mercury extremely doubtful in cases of chancre. We should never proceed to salivate a patient, who has sores on the penis, without regular advice. The simplest soothing applications will, in a few days, change the character of an angry-looking sore.

DISEASES OF THE EYE.

Ophthalmia or inflammation of the eye is not uncommon, but seldom equals in severity the dreadful forms of it observed in other warm climates. It comes on with heat, pain, redness, intolerance of motion and light, a copious discharge of a watery humour, that is very acrid, and excoriates every part. Febrile symptoms occasionally are present. The swelling spreads in every direction. The eye-lids are œdematous, and prevent us from obtaining a view of the eye. If only one is affected, it generally happens that inflammation succeeds in the other. As this proceeds, a secretion of a purulent-like matter takes place from the surface. The agony of the patient is extreme. If we can at this period obtain a sight of the ball of the eye, the part usually transparent is muddy, or covered with small white specks, that denote the commencement of suppuration of the cornea, which allows a portion of the *iris* to protrude, and thereby obliterates the pupil. When we have not been able to see the eye-ball till the inflammation has abated, we are often astonished to find a substance protruding, of a dark colour, to a greater or less extent. Such a termination is generally attended with total loss of vision, and requires immediate surgical assistance.

Treatment.

In plethoric constitutions, and when the inflammation runs high, bleeding is requisite, either from the jugular vein or temporal artery, or by cupping the temples; the latter is to be preferred. If we can see any enlarged blood-vessels on the ball of the eye, they should be divided. An active purge is to be given, and repeated every second day. Washes of a cooling and astringent nature are

to be freely used, as white vitriol, sugar of lead, of each eight grains, three wine-glassfuls of water. The patient to lie on his back, and apply it to the eye by means of pieces of lina rag. Alum, half a drachm, *Mindererus' spirit*, half an ounce, to be mixed and freely used. Weak spirits and water, or vinegar and water, are also proper; the alum poultice, made with the white of eggs or milk, wrapped in linnen, and frequently renewed; where pain is severe, forty drops of the vinous tincture of opium should be added. Its internal use will also be of service. The alternate use of hot and cold applications has succeeded, when singly they give no relief; when there is great pain of the head and continuance of the inflammation, a blister to the neck, one on each temple, or behind the ears, and kept discharging by some stimulating dressing; when the chronic state supervenes, the vinous tincture of opium, cold bath, and all local strengthening medicines, may be freely used.

After the termination of ophthalmia by ulceration and protrusion of the *iris*, opacities of the cornea are most to be dreaded. When films ensue, as a consequence of injury done to the front of the eye, they are much more easily removed than those that are the result of inflammation. Goulard's water, mixed with white vitriol and blue stone, according as the case may require; finely pounded glass, with salt or alum blown into the eye; two grains of corrosive sublimate to a wine-glass, or some of lunar caustic; the speck to be touched with this three times daily by means of a fine camel hair pencil; a few drops of the juice of the *wildcelandine* or parrot-weed (*boëconia frutescens*), is a favourite country remedy, and, from many trials I have made of it, seems worthy of confidence. The *gall* of fish and of others dropped into the eye is greatly spoken of. It causes great uneasiness at first, which soon abates. It appears to act in the same manner as a weak solution of lunar caustic. When opacity is the result of previous diseased action, our hopes of cure are much less certain; the morbid growth requires to be removed by the knife, or dividing the blood-vessels going to it. The coats of the eye become greatly relaxed, and the strongest astringents necessary. The solutions of lunar caustic and corrosive sublimate must be increased in strength, according to the feelings of the patient; a piece of the former, pointed and held to the spot for an instant, using immediately sweet oil to prevent undue irritation, is a powerful remedy. The natives, in cases of great relaxation, apply a diluted infusion of the strong bird-pepper,

They have a variety of juices from various plants that are in great esteem with them. In obstinate cases we should never refuse the trial of them, but our artificial preparations are much rather to be depended on.

In consequence of ophthalmia and other causes, there often grows from the internal angle of the eye a preternatural ash-coloured triangular membrane, that gradually extends over the transparent part of the cornea, and impedes vision; it is called a *pterygium*. The point of the triangular plexus of loose vessels is always directed to the centre of the cornea; the complaint is common amongst negroes, and attacks both eyes; if neglected, it increases to that extent that vision is nearly lost. The number of invalids from this cause is immense, whereas, if taken in time, and the morbid growth removed by means of the knife, the patient would experience but little inconvenience. It is the duty of every one, when such a formation takes place, to call in surgical assistance.

LOCKED JAW.

This horrible disease, proceeding from the most trifling causes, carries off many valuable negroes. I do not believe in the common opinion, that the African race is more obnoxious to it than Europeans. It is more frequent with them, from their being more exposed to the exciting causes, as cold, wounds of the feet, splinters of wood, &c. When the disease originates from wounds, it generally shows itself about the eighth day, and with a gradual aggravation of the symptoms. Where the cause appears to be exposure to cold, or some discharge suddenly suppressed, the symptoms invade much earlier, and with more immediate violence. These are so obvious as not to require any description.

A few years ago I published in the Edinburgh Medical Journal the result of several cases of locked jaw and trismus nascentium, with a minute description of the appearances on dissection. Since that period I have not omitted any opportunity of continuing the investigation, and have been enabled to add the result of several other morbid examinations, which have in a great measure confirmed my former statements.

Whatever may have caused the excitation, the deranged action is quickly propagated to the origin of the nervous system, and there creates an accumulation of blood, followed by extensive serous effusion on the surface of the brain and spinal marrow, mixed with coagulable lymph, indicating the presence of previous inflammation; the functions of the nervous system are speedily interrupted, and followed by the most alarming and fatal symptoms. Such morbid changes I have uniformly found to prevail in a greater or less degree in every case that I have examined, and, although our hopes of cure are diminished, the means of relief are of a more local nature.

The great practical distinction necessary to be kept in view is where the disease is the result of cold, or is caused by extensive lacerations and punctured wounds.

In the former case our plan of cure should be continued with the greatest energy, as our hopes of relief are much more certain. If the patient is strong and plethoric, and has been attacked after exposure to cold, preceded by drunkenness, blood to a considerable extent is to be drawn, and repeated if necessary, judging by the state of the pulse; three grains of opium with twenty of camphor, made into pills, may be swallowed; in two hours a strong drastic purge, followed with a clyster of asafœtida and Glauber's salts. If the spasms are severe, and invade suddenly and generally, no time should be lost in administering the cold affusion. Strip the patient, and suddenly dash a pailful of water over the body, rub him dry, and endeavour to induce a copious perspiration; one hundred drops of laudanum may be repeated with brandy strongly spiced; if the spasmodic state of the abdominal muscles is severe, frictions with oil, turpentine, laudanum, and camphor, should be long and sedulously persisted in; they are attended with the greatest relaxation of every symptom; cupping along the back part of the neck; an extensive blister should seldom be omitted; warm fomentations to the feet, cataplasms of pepper and mustard, mixed with an ointment made from the juice of the dumb-cane.

It is in this species of locked jaw from cold that affusion of water is of the most essential service. It may, at the commencement, be repeated every two hours, and is usually followed by a relaxation of the spasms. My worthy friend, the late Dr. Wright, gave me many salutary directions as to the use of the cold affusion. It was latterly his particular desire that it should more especially be trusted

to in cases not originating from wounds, and be combined with every other remedy. Brandy mixed with strong mustard is an excellent sudorific. Immediately after its application, repeated and large doses of camphor, dissolved in a small quantity of spirits, pills of strong Cayenne pepper, mixed with concrete salt of hartshorn and wild cinnamon, will promote that state of activity and perspiration that often proves critical at this stage of the disorder. Ether, hartshorn, and sweet spirits of nitre, may enter into the list of remedies. Musk and castor, formerly so much boasted of as powerful antispasmodics, are of little essential service in any disease. This I can assert from many experiments made on the healthy subject.

Strong and repeated drastic purges have been highly recommended by an eminent physician as a specific in locked jaw. Suggestions from such authority extend their influence in a rapid manner. I have therefore in a former publication endeavoured to show that the worthy gentleman has mistaken cases of spasmodic illius for tetanus, and these arising in a cold climate. Often have I seen pills made of scammony, gamboge, calomel, and jalap, exhibited to such an extent, as to deter others from their further use, when a few grains of opium, or a clyster of asafœtida and castor-oil, with laudanum, would cause them to operate in the most violent manner, after they had lain long in the bowels without producing a single motion.

It may appear singular to say that opium will act in this manner, yet when the intestinal tube partakes of the general spasmodic state of the system, it will be found to be quite indispensable, so as to secure the operation of the simplest cathartic. This fact should never be lost sight of by those who administer active purgatives in such cases, and the remark will be found to hold good in all nervous disorders, especially the dry belly-ache, when it attacks white subjects, as also in many inflammatory affections.

Opium, wine, and other stimulants are the remedies we are to look to with the greatest confidence. The extent to which opium has been given is wonderful, and appears more so to those who know its violent effects on the healthy body; half an ounce of laudanum has been given at once, and as a first dose, with a repetition every second hour, and the patient has recovered. I once saw a desperate case, where a hundred grains were given every half-hour, and without any visible effects worth mentioning; the

quantity when great does not certainly produce a proportional effect; we must regulate its administration from very careful observation; two or three ounces of strong rum, brandy, or wine, should be given along with it; laudanum, as it is prepared on most estates, must never be trusted to, the strength is so various; if we cannot get the solid form to be swallowed, the aqueous solution already alluded to should be given without delay; it may be prepared as we want it, and with a less quantity of water than usual, adding brandy, in which camphor is dissolved, with other stimulants: The most beneficial effects are felt from using it just after the patient has tried the cold affusion, as it is most likely to excite that salutary heat which often resolves the spasms. Much discredit has of late been attached to the cold affusion, and which has induced some practitioners to lay it aside altogether; its injudicious application, rather than the remedy itself, has been the cause of this, and such has in general been the case with every means of relief of a popular nature; the numerous instances on record, where the disease was put a stop to from its powerful influence, are too evident and well authenticated to be shaken by the authority of any individual.

We are not, however, to be bigoted to one side of the question. If we find that the spasms are not diminished, nor any of the more urgent symptoms mitigated, no time should be lost in making an effectual trial of the warm bath. The patient should be put into it up to the chin, or lie in the horizontal posture, for ten or fifteen minutes, according to the severity of the spasmodic twitchings; the whole body during the operation should be extremely well rubbed. When taken out he is to be wrapped in a warm, soft blanket; the extremities are to be rubbed again, also the spine; warm fomentations repeatedly applied to the region of the belly; frictions of opium, turpentine, hartshorn, long continued, are particularly to be insisted on; the relief obtained from using opium in an external manner is very great; it ought never to be omitted. In several instances I have first tried the cold affusion, and immediately afterwards the warm bath; the patients recovered, and of course I attributed it to my efforts, with what justice I shall not say. Those affected with locked jaw will die under every mode of treatment; at times the kind and salutary movements of the system will overcome the severest forms without our assistance. We are not, however, on this account to intermit our exertions; they

may coincide with the secret workings of nature, and accelerate her progress; and, if they are in opposition, her efforts will prove a barrier sufficiently strong to counteract their baneful influence.

Many experienced practitioners advise the immediate use of mercury in idiopathic tetanus, or where it does not arise from external injury done to the body; the effects are powerful, but for my own part I would much rather prefer it when wounds and laceration of the parts have preceded the symptoms; if it is to be given, no time should be lost; three grains or more, made into pills, with opium and camphor, or frictions with the ointment. Many have gone so far as to give a scruple of calomel every day, with the view of exciting a rapid salivation, but this is improper, and induces the most alarming consequences. The life of the patient is not out of danger, even although the mouth becomes sore: Cases are detailed where they have died while labouring under a profuse salivation: I have witnessed two myself. We need not be deterred from the use of the cold bath during the exhibition of mercury; some say it promotes its action; but I much question this.

LOCKED JAW FROM WOUNDS, &c.—The symptoms commence as early as the fourth day, and as late as three weeks, with every degree of violence, and from wounds apparently of the most trifling nature, which in the interval have healed up, and created no alarm. Soreness of the throat and slight difficulty in swallowing are the first things to alarm us, and they are quickly succeeded by the most frightful spasms. When a negro meets with a deep wound from a nail, splintered wood, broken glass, &c. accompanied with laceration of the tendons and nerves, locked jaw should invariably be considered as a consequence most likely to ensue, and, as preventative means are the most efficacious, no attempt must be omitted to oppose the invasion of this disorder.

If we see the patient shortly after the accident, the wound must be carefully examined, any lacerated tendons divided, and all extraneous matter removed, then washed with tincture of myrrh; pour into it a strong solution of opium and oil, laying a pledget of lint on the surface, a large warm poultice over all, mixed with a wine-glassful of spirits of turpentine; the poultice must be renewed three times a-day, and at each dressing the foot or injured member soaked for ten minutes in water, as warm as can well be borne; bark and wine are to be administered freely, with food of the most nutritious quality, so as to excite the general and healthy action

of the system to the formation of an early suppuration. Most persons are contented with this mode of proceeding, and undoubtedly it is productive of the greatest advantages, saving the lives of many individuals: Still, in every case that has been entrusted to my care, I have invariably made it a rule to add the general and powerful effects of mercury, combined with opium and camphor, and, according to the general mode of medical reasoning, every confidence may be placed in its active assistance.

When the fleshy parts are much bruised and lacerated, attempts by stitching and adhesive bandages to induce a union by the first intention, as surgeons call it, are in general nugatory, if not dangerous. Wash the parts free from all sand, &c. and replace them, if possible, in their natural situation, using freely a mixture of opium and oil, a dressing of fine lint; the next day, if from appearances there is no prospect of saving the injured substance, although the wound be in what is termed a *green state*, a large poultice, as already mentioned, with fomentations, will be requisite; internally opiates, bark, and wine; the natural efforts of the constitution will often restore extensive injuries that at first sight seemed hopeless; judgment, therefore, on every case should only be passed by those whose experience authorizes it.

Hitherto we have only considered the prophylactic plan: A much more serious affair presents itself; when the symptoms have actually invaded, the wound must be examined. What we have most frequently to complain of is a total want of inflammation and suppuration in the part, and every effort must be used to induce this in as speedy a manner as possible.

A strong solution of lunar caustic, corrosive sublimate, or butter of antimony, must be applied to the wound; if deep, a piece of lint dipped in the same, and pushed up with a probe; let this be succeeded by the warm bath and fomentations, or, what is still better, warm oil, then a large poultice with turpentine, adding bruised peppers, mustard, to be renewed five or six times daily, placing the leg in warm water after each removal. Mercury must be immediately commenced, and our utmost endeavours exerted to excite a rapid salivation, frictions with the ointment, if the patient cannot swallow pills, and even stronger preparations, are requisite;*

* Corrosive sublimate, one grain and a half, made into four pills, with opium and camphor, and taken during the day, using also mercurial frictions; when speedy salivation is required, mercurial fumigations are advisable.

opium as before advised to a great extent, with camphor dissolved in brandy or rum. When opium produces unpleasant consequences, from the extent to which it is given, camphor will be found a most valuable substitute; a scruple, dissolved in a small quantity of spirits, may be taken every third hour during the day, watching narrowly its effects. Ether and other stimulants can be added, as they are indicated. Our chief hope rests on the relief to be obtained from the warm bath. The patient is to be put into it up to the chin, and kept there from ten to fifteen minutes, and to be repeated, according to the urgency of the convulsions, rubbing the body for a length of time after each operation; bark, wine, highly nourishing diet, must form a necessary part in the treatment.

Some years ago an American physician imagined he had discovered a certain *antidote* in tincture of cantharides, given in large doses, but, like most others, it has been found useless. Indeed it is a melancholy fact in the history of diseases, that the more numerous is the list of remedies, the less confidence is to be placed in any of them. When the form of tetanus is of that nature as to allow the subject to survive the fifth day, we fondly attribute his recovery to our anxious interference, and celebrate the wonderful virtues of some particular drug as a sovereign cure in every case that may happen hereafter. To combat such assertions would be the height of folly. They only afford a repetition of numerous instances, where nature is deprived of her proper merit, and these pretenders know full well that she is of long suffering, and insinuates her claims by no boisterous acclamation, otherwise thousands would every day be made to blush for their insolent arrogance.

WORMS.

Of all complaints this is the one the planter should make himself most completely master of, from its varied appearance, fatality, and being so much under his power by judicious management. It has been very properly observed that there is not one symptom, with which the animal economy may be affected, which worms are not capable of exciting. To attempt a description would be im-

possible. I shall only mention the mode of attack at different periods of life.

Negroes at a very late period of life are much plagued with them, though seldom dangerously. I have known many cases where they seemed to be habitual: They are generally vomited, the person feels a *gnawing* acute pain at the pit of the stomach, and can tell from experience the cause of his sickness. Indigestion and an irregular state of the bowels are constant attendants. The tænia or tape-worm is not uncommon in adults. It is more generally passed downwards than by vomiting, and not suspected until some portion appears. I remember a singular case some years ago, where, from the anomalous symptoms, I judged that worms in the stomach were the cause. After giving some sweet oil and turpentine, the patient was instantly seized with the most extraordinary feelings. She vomited, and discharged nearly three feet of the worm. By using gentle means the whole was extracted entire, and it measured three yards in length.

In children we may suspect worms when there are indigestion, irregular watery stools, griping, frequent vomiting, foetid breath, dull, bloated countenance, pot-bellies; in those of a fairer complexion the dark ring beneath the eyes may be trusted to, sleepiness, and at times voracious appetite, and the food taken passed quickly. When the proper remedies have been omitted, the worm fever ensues, and in the strangest forms, so as to deceive the most experienced. Dry, burning skin, delirium, tossing; breathlessness, with cough of a peculiar sound, violent vomiting and purging, though oftener constipation, symptoms of pleurisy (which I have already alluded to), convulsion fits, and various forms of tetany. It is no criterion of our opinion being erroneous that worms are not passed at the time we give the remedies. The action of anthelmintics is very capricious. It may be weeks before any are voided. I have known infants not more than six weeks old pass worms.

The mode in which worms are generated in the body is still mysterious. The quantity of viscid vegetable food favours their production. Many suppose the ova are contained in these substances. The *Foolas*, an African race, and those around the Cape of Good Hope, attribute the frequency of tape-worm amongst them to the great use they make of a milk diet. Negro children are surfeited by their mothers with milk, and this too when they are far advanced, and the nourishment is no longer fitted for the body.

Such a practice I have no doubt is a common cause of worms, and is one amongst many other reasons why we should insist on their weaning their children at an earlier period. The prognosis in this complaint is so deceitful, that the most extensive experience fails us in our judgment. When purgatives pass through at an early period, and any worms are voided, the patient is safe. If all the symptoms indicative of worms subside without any being evacuated, the person will have a relapse soon, or die suddenly. If vermifuges put a stop to diarrhœa and fever, the termination will be favourable.

Those that have fits, but void no worms, die suddenly. Sleepiness after worm symptoms and great yawning denote disease of the head, and is always fatal; pot-bellies, as they are called, without other signs of worms, are not infallible precursors. Many negro children who have naturally this appearance enjoy the best health; it disappears as they advance in life.*

If, after a course of medicines, symptoms of internal commotion ensue, without a favourable discharge, unless nature be assisted by further remedies, the patient will die suddenly. Children seemingly in the best health will be instantly seized with convulsions, and expire. Worms will crawl out after death from the mouth and rectum.

I am quite at a loss how to explain the fatal termination in many instances from so simple a cause in appearance. I have opened the bodies of many who have died of wormy complaints, and found not the smallest approach to diseased structure in any part. As an exception to this remark, I must mention the result of several dissections of negro children, where, from the great degree of drowsiness and other symptoms, disease of the head was indicated; water was found in considerable quantity in the ventricles, and flowed also from the spinal marrow. The effect of long continued irritation in the intestines induces this chronic *hydrocephalus*, which I shall show, when speaking of water in the head, carries off many more negro children than people are at all aware of. Masses of these animals have been taken out alive sixteen hours after death. The mesenteric glands are scarcely ever affected. When the subject has complained long, and been greatly reduced, the ventricles of the brain were filled with water. This is what might have been expected from the long continued irritation in the bowels, and it is

* Winterbottom on the Diseases of Africa, vol. 2.

a mode of termination that we may always look for in the diseases of children.

Treatment.

In adult persons, as vermes are usually lodged in or near the stomach, a vomit should be given as soon as any symptoms appear.

Gamboge thistle, a drachm of the seeds; expressed juice of the red-head or bastard ipecacuanha, three tea-spoonfuls; blue vitriol, twenty grains; a pint of water; a wine-glassful every ten minutes, till it operates; afterwards a purge of six grains of gamboge, twenty of aloes or calomel and jalap, and cream of tartar. When they have operated, a table-spoonful of pure spirits of turpentine; two of sweet oil, with molasses, should be given; the expressed juice of the aloes or sempervive may be substituted for the oil, drinking freely of strong contrayerva bitters, vervain tea, and lime-water, which acts chemically on the mucus in which they are involved. If, no benefit is derived from these medicines, the vomit may be repeated next day, with a strong purge, then castor-oil and sempervive juice, with decoction of worm grass. The most serious mistake arises from abandoning the use of these remedies too speedily; we lose hopes, or conceive our opinion to be erroneous: Now the action of anthelmintics is so uncertain, that we never can promise relief from the same one in two successive cases, and great part of our success will depend in varying these in every possible form.

Negroes troubled with worms in the stomach have an idea, which is of African origin, that the strongest spirits drank in an undiluted state will operate a certain cure. I have known more than one case, where sudden death was caused by an overdose being taken from the anxiety of the patient to get rid of his unpleasant feelings. Many Africans consider it as a sovereign remedy for every complaint, and it is privately given in their most acute disorders.

Children are troublesome patients; the degree of feverish restlessness and irritation excited prevents them taking the medicines we wish, and in proper quantities. When the symptoms seem unequivocal, with irregular fever, a gentle puke of ipecacuanha, or a mild solution of blue vitriol, as already directed, will be of advantage. Cowitch, with a few grains of calomel, for three nights, adding the sempervive juice, if they will swallow it, then nut-oil or emul-

sion of the seeds, will often bring away masses of these animals. The worms in children are of the smallest kind, and lodge in the lower part of the intestines; clysters are therefore indicated; a table-spoonful of turpentine, one of nut-oil with table salt, or a solution of aloes, in warm water, sweet oil, three spoonfuls, Epsom salts, a spoonful; to be thrown up very gently, and kept up by means of a cloth for ten minutes; this last direction must not be omitted; the materials have time to operate, by being directly applied to the parts, and the superior intestines are affected sympathetically; when children are cross, frictions of turpentine, mixed with the sempervive juice, and rubbed for a length of time on the belly, generally produce several evacuations in three or four hours, and this will be found a very valuable method of introducing purgatives, when causes prevent their being swallowed; the frictions must, however, be long and gently continued; it is much used by savage nations, and is worthy our imitation; the negroes are exceedingly fond of it.

When the disease is attended with fever, warm bath, fomentations to the belly, large, coarse aloetic plasters to the stomach, small blisters, cataplasms, injections of turpentine and laudanum, a few grains of salt of steel, with two or three of blue vitriol, have been found efficacious in such cases.

When the small worms are voided, lime-water with salt and asafoetida forms a good injection; mixed with milk, it is good as a tonic.

I once tried the effects of cowitch mixed, as I thought, with plenty of mucilage, as an injection, in a case of ascarides. Though many worms were voided, the poor child was so much tortured for three or four hours afterwards, that I heartily repented of the experiment, and have never ventured on a repetition of it. I have seen tincture of steel, powdered tin, mixed with molasses, pink root, have excellent effects in expelling worms, when others have failed. To the planter the most important consideration is the preventative means. On this he cannot bestow too much attention, and the numerous deaths we every day witness prove too clearly the negligence of those who are entrusted with the care of them. A spoonful of cowitch, followed next morning by a dose of nut-oil, given once in a fortnight, occasionally once a month, is the general mode of using worm medicine as a preventative on most estates. The inefficacy of such a mode of proceeding could easily be

pointed out, and the dangerous results proved from the numerous deaths that happen on properties where it is accustomed to be given with the greatest regularity; the increased quantity of mucus with which the internal coats of the intestines are lined, augmented by the viscid nature of their daily food, causes an accumulation of matter that protects and favours the developement of the *nidus* of the worm in a remarkable manner. A spoonful of cowitch mixed with molasses, and given once a month, when diffused over so large a surface, offers but a trifling antidote, and will generally deceive the expectations of such as trust the lives of children to its operation.

Its administration should therefore form a part of the duty of those who have the immediate management of a property, and be as regularly attended to as the return of apparently more important concerns.

At present on many properties I know it to be utterly neglected, not so much from indolence as from a conceived contempt of its advantageous consequences; and, indeed, considering the numerous deaths that happen on estates from worms, where the medicine is given in a partial manner, they have some foundation for their opinion, and it will continue to prevail unless more active measures are adopted.

In addition to its being *generally* given, those subjects should be selected, who seem more predisposed to generate worms by their weakly habit of body, and being ill fed. With them the remedies must be longer continued, and in larger quantities; their evacuations particularly attended to, and a diet of animal food for some time.

In judging of the presence of worms, we are not altogether to be led by the enlarged state of the belly, for it has been remarked that many negro children have at an early age a prodigious enlargement; they do not attribute it to worms, nor any internal disease; no attention is paid to it; as the subject advances in life it gradually disappears; a person in the habit of seeing children in a naked state can readily distinguish this affection from the swelling that takes place as a consequence of worms; in the former it is lower down, to the feel soft and yielding, the skin is of a healthy appearance, and there is always a strong curvature in the lower part of the spine; in the latter the tumefaction commences from the pit of the stomach, and in general all over the abdomen; it is tense, feels hot, and increases much after meals; the child other-

wise has symptoms indicative of constitutional disease; the eyes heavy and face bloated.

As a preventative plan I would strongly urge the following one, which has been sanctioned by long experience as the most effectual.

Every month let the children and other negroes suspected of worms be collected in the morning; to the expressed juice of the red head or wild ipecacuanha a third part of molasses is to be added, being just suffered to boil, and then skimmed; from one to three tea-spoonfuls, according to the age, may be given as a vomit; it operates briskly and safely, drinking freely of beverage; the subjects may then go to their work, and in the evening they are to have a mixture of cowitch and syrup; the spicula of six pods may be given to adults with impunity for a dose; indeed the quantity given at a time is generally too small, as it rarely irritates the intestines; in gross habits a few grains of calomel are to be added with good effect; next morning a purge of cabbage-bark is to be taken, thus prepared—two ounces of *well-dried bark*, to be boiled from three pints to two, strained and sweetened with sugar, from one to three table-spoonfuls according to the age; when well prepared, its effects are speedy and perfectly safe. Many entertain a prejudice regarding it from cases where it has operated with violence; this is owing to the peculiar state of the patient's body at the time, which may happen with all purges, but oftener to its being used in a green state; the cowitch is to be repeated for three nights, followed in the morning by a dose of oil, or the fresh nuts bruised and made into an emulsion instead of the cabbage-bark. As a general mode of treatment these directions are sufficient; we may vary them to any extent we please; the puke of redhead may be omitted in those of a tender age, but it is absolutely necessary to the more advanced, as the worms are lodged much nearer, if not actually, in the stomach: I have often seen masses vomited in a living state. For the cabbage-bark other purges may be substituted with equal advantage. There are many country plants that excite the action of the intestines in a rapid manner, but they are so unequal in their effects, and the doses so uncertain, that we should never administer them to children; what will operate gently in one case will produce the most alarming symptoms in another; much likewise depends on the time of the year and state of the plant we make use of.

But the remedy on which the greatest reliance is to be placed, and of the effects of which I can speak with the greatest confidence, is the expressed juice of the aloes (*sempervive*). It is a most valuable laxative in cases of obstinate worm fevers in children, and operates in the gentlest manner. A tea-spoonful of the juice to a table-spoonful expressed from the fresh leaf, mixed with two parts of castor-oil or sweet oil, and sweetened with molasses. I make it a universal rule in obstinate cases of worms, after every third dose of cowitch, to give a spoonful of the juice with nut-oil, adding a few grains of calomel if requisite, and causing the patient to drink a pint of vervain-tea during the day, made very strong: This course may be continued for a fortnight without the smallest inconvenience or danger; when we are certain worms are present, a proper perseverance is the most important point in the treatment; we can vary the nature of our remedies as we please, but let them be continued regularly for a length of time, and, although no worms are voided during their exhibition, we are not to conclude that we have mistaken the case, these animals occasionally retaining such an obstinate hold as to resist our best-directed efforts,

The juice can also be rubbed all over the belly, and, when small white worms are voided, mixed up as a clyster it will produce the happiest effects. In the symptomatic *locked jaw* which attacks children, in consequence of the irritation that proceeds from worms, I have repeatedly trusted to it entirely, as affording the means of relief. *Vervain-tea* is much esteemed with the negroes as a vermifuge, and with justice; it is also a gentle laxative; it therefore ought constantly to enter into our list of remedies: *Lime-water* acts chemically, by dissolving the mucus in which worms reside: A pint should be given daily.

Worm grass, made into a decoction, has long been celebrated as one of the country remedies. Many kinds are brought to us by the negroes. The real worm-grass (*spigelia anthelmintica*) I never saw growing in this part of the island. On sugar-estates the preventative plan during crop is not so necessary from the vast quantity of *liquor* they drink, but on other settlements, or where the seasons are very wet, and the negroes live much on ground-provisions, it must be repeated every month, so as to ensure its good effects; and those subjects who are most troubled with them should be treated as the individual case may require.

SMALL-POX, CHICKEN-POX, AND COW-POX.

I deem it superfluous to enter into any description of the varieties of small-pox, and the mode of treatment in this place. Happily for the human race this loathsome malady has been disarmed of all its terrors. Even the practice of inoculation renders it comparatively mild, and vaccination supersedes it entirely, except in some anomalous instances, which are of no authority in estimating the benefits of this blessed discovery. Formerly one subject in seven was supposed to die when the disease was produced in the natural way. By inoculation the mortality was reduced to one in nine hundred. It is somewhat singular that the practice of inoculating for the small-pox has been known from the remotest ages in many parts of Africa, even before the introduction of *Mahometanism*. They term it *buying* the small-pox, from the circumstance that the parent of the child, from whom matter is taken, always expects a small remuneration from the person to whom the disease is communicated: Every practitioner knows that they transfer this notion to the cow-pox, and the mothers are greatly offended, if you neglect giving them some small gratuity, after having received lymph or a crust from the arm of their child.

To the inhabitants, therefore, of this part of the globe, whom we are disposed to regard as the most degraded of our species, was revealed, at an early period, a plan that has saved the lives of millions. Conscious superiority or other causes may have prevented its having been adopted at an earlier period by the European nations, who styled themselves enlightened. What a different aspect might the history of human affairs have presented at this time, had the practice of the discovery sooner become general? What myriads of lives might have been spared, what misery prevented, had it been known to the Spaniards ere they imprinted their cursed footsteps on the peaceful shores of the unsuspecting natives of America? Such awful considerations make the most superficial pause in the career of their observations, but it is better to proceed, for the recollections are sadly at variance with the favourite opinions of modern orthodoxy. It has been remarked that Europeans suffer

much more from small-pox in warm climates, and negroes in cold ones.

CHICKEN-POX.—This is worthy of being understood from the great alarm that it frequently creates by being mistaken for small-pox. As an epidemic it occurs often in this island, particularly in tracts of long, hot, dry weather. It originates undoubtedly in many instances from causes distinct from contagion, though it afterwards becomes infectious in a high degree, and spreads through families, estates, and certain districts of country. Children are more liable to be attacked with it. In general it is mild, yet, from some peculiar constitutional affection, it is so severe as to be mistaken for small-pox. I have seen two cases terminate fatally: In one the eruption was confined to the head and neck, and, from cold being suddenly repelled, the patient died delirious; water was found in the ventricles of the brain. There are two varieties, the pustular and lymphatic. In severe cases of the first matter is formed, and the mark left in the skin is in the form of a small line, a distinguishing character from the cicatrix of small-pox, which is of an oval form. In chicken-pox, the milder the disease, the sooner does the eruption appear after the first access of fever; the reverse is true in small-pox. In the former the fever ceases when the eruption appears, which is not the case in the latter.

The chicken-pox do not make that regular progression in eruption, suppuration, exsiccation, which the small-pox do from the face to the extremities, but appear and terminate on all parts of the body nearly at the same time. On the fifth day they dry and form a scab, without any secondary fever. I have ascertained that it may be produced by inoculation. I have an example in my own person of the truth of this. The treatment is simple in the extreme. Some cooling medicine, avoiding cold. The patient should be separated, so as to prevent its further propagation.

COW-POX.—The question regarding the power of vaccination to prevent the future appearance of small-pox was, in the opinion of most medical men, drawing near to a close, and those that resisted were considered as obstinate characters, who wished to attract notice by the singularity of their assertions. Of late, however, a very different turn has been given to the investigation, and the mass of evidence, brought forward by the highest authority, proves unquestionably that vaccination does not in every case prevent the future attack of a *modified form* of small-pox, which

however, is attended with little danger, and has been termed the *variolid* disease. Some still insist that it is nothing but a severe form of chicken-pox. The case is now clearly made out against them. We have still the satisfaction to know that in those subjects previously vaccinated, when the epidemic small-pox did ensue, it was of so mild a nature as to attract little attention, whereas it frequently proved fatal to those who had not previously undergone that operation: In this situation the question now stands. I might have omitted it altogether as foreign to the nature of this work, but I know that some in this island have already taken advantage of it from motives which I should be sorry to mention,

The operation is generally performed in so careless a manner, and so little attention paid to the further progress of the disease, that hundreds, who imagine themselves secure from small-pox, would be infected with it, in case of its again becoming epidemic. I have repeatedly vaccinated those who have been reported as having previously undergone the disease, and found a regular constitutional affection to follow, proving clearly that the previous vesicle could only have been of a local nature. Imperfect vaccination is of much more frequent occurrence here than in Europe, and we are required to be more on our guard in operating. Make six punctures, three in each arm, or a number of small ones close to each other, so that when they inflame they may unite into one large vesicle. Many order that the scratch should be so slight as not to be followed by any bleeding. From the thickened state of the cuticle in some negroes I prefer making slight incisions with a clean lancet, and if blood flows allow it to coagulate, then wash it off, and apply the liquid matter directly to the wounded surface. If the infection has succeeded, the vesicle gradually increases, the edges are hard and elevated. On the seventh day an areola or inflammatory circle is formed; the parts are tumified and full, hard and solid; this inflammatory ring is not easily perceptible in the negro, but gradually becomes more distinct as the complexion approaches the white; the circle fades on the tenth or eleventh day; the centre of the vesicle turns brown, and soon forms into a hard, smooth crust, which falls off at the end of the third week, leaving a permanent cicatrix. The vesicle in the negro I have always found to be smaller than in the European, and the swelling much less extensive. " Those who vaccinate without medical assistance should always use the *double test*. Thus, on the fourth

day, after the first matter has been introduced, inoculate a second time; if the constitution is affected, the vesicle from the second puncture will come to maturity at the same time with the first, though it be of a much smaller size; if this does not happen, the disease has not succeeded properly, and the operation must be repeated. This fact is valuable to those who are not aware of the various stages of the true vaccine vesicle. In the irregular vesicle the centre is elevated and pointed; it is easily broken; there is no areola nor hardness in the surrounding parts; it declines suddenly; the crust is light-coloured, and the cicatrix imperfect. The causes of such an occurrence in warm climates are chiefly owing to the rapid tendency animal matter has to pass into a state of putrefaction, and the intensity of the heat: The influence of the latter forms a singular fact, which is not generally known, in the history of vaccination: At different times during the hotter months of the year I have been much surprised to find an entire stop put to the progress of the disease, and fresh lymph from an active vesicle to produce irregular inflammation. On communicating this fact to my venerable friend, Dr. Quier, I found the same thing had happened to himself at various periods, and he mentioned the circumstance as one that had been complained of by other practitioners. This would suggest the idea, therefore, that in tropical climates, spring and autumn are the seasons the best adapted for prosecuting it, and that those who have the charge of sending a regular supply should so dispatch it, as to ensure its reaching the West-Indies before the month of May, or after September. Instead of its being put up in the superficial manner at present practised, its effects would be much better ensured, if it were enclosed in a glass phial, well stopped, and placed in a small wooden box, surrounded by some non-conducting substance; culinary salt is as good as any I know of. If this were the case, we should have fewer complaints than we at present have of the inefficacy of European matter. I have known a crust produce an active state of the disease four months from the time of its being dropped, great care being taken to preserve it.

ITCH, RING-WORM, &c.

From the constant flow of perspiration negroes are little troubled with the real itch, compared to its frequency in cold climates, and it is much more diffused over the body. Young children are extremely liable to an obstinate and extensive cutaneous eruption. On many estates we do not find one without it, and from neglect on the part of the mother it proceeds to open ulceration. In infants it generally arises from the mother's milk. Negro women are so abundantly supplied by nature, that, to get rid of the superfluous quantity, they actually gorge their children with it; their own food is gross in the extreme; they pay no attention to the nature of the substances they devour, which causes the milk to disagree with the tender state of the intestines; they view this eruption with perfect indifference; many judge it to be salutary, and disregard any directions as to its cure. It is not the true itch, nor is it in my opinion infectious. Frequent warm washings, with soap or coratoc-juice, giving the mother sulphur, and restraining her in the articles of diet, are all that need be done; as the child advances it gradually ceases of itself.

KRA-KRA is a corrupted Eboe word. It appears in large superficial crustaceous blotches, chiefly about the buttocks; it seems rather to be a disease of the system than merely of the skin; it is not looked on as contagious by the negroes themselves: They attribute it to some kind of food disagreeing with them. I have ever found the sulphuric ointment, made by mixing well a table-spoonful of oil of vitriol with a cupful of grease, and anointing the parts therewith, to be a safe and sovereign remedy. If it does not yield to simple external means, smart purges, a course of sulphur internally, and sea-bathing, will soon succeed, if persevered in; we may wash the sores with the juice of the *stinking bush* (*cassia occidentalis*). The fevers and constitutional derangements in the negro race often terminate by the most singular cutaneous eruptions; they present every appearance, and come out in successive crops for a length of time; the blotches are mistaken by many persons for yaws, to which they have a great resemblance; being connected with a deranged state of the system, they are to be treated by every means that may improve the general health and state of the digestive organs.

HERPES—RING-WORM.—All the varieties of herpetic

eruptions are confounded under the general name of ring-worm by negroes. It is of little consequence as to the mode of cure.

The negroes rub the part till it bleeds, and then wash with the juice of the French guava-tree or ring-worm bush (*cassia alata*); it is considered as a specific; gunpowder, lime-juice, tobacco, sulphur, mixed with the juice of the ring-worm bush, are common applications; a sulphur plaster worn over the part, juice of the dumb-cane, bruised peppers, weak mercurial ointment, blue-stone water, or solution of corrosive sublimate, externally applied, as the patient may feel inclined, in obstinate cases. The long continued use of warm sulphur bath and waters, with the decoction of the native woods, is highly recommended.

CATARRH, SORE-THROAT, RHEUMATISM, &c.

When the cold damp north winds first begin to prevail in the fall of the year, and during sudden alternations of temperature, from heavy showers suddenly lowering the previous heat, negroes are extremely subject to coughs and colds, in a more or less severe degree. They proceed over certain districts of country in so rapid a manner, that many are tempted to consider them as epidemical; they seldom amount to cases of pleurisy; and yield to moderate bleeding, sweating remedies, and demulcent preparations; the sweating regimen must not be forced at too early a period; vervain and sage tea are proper; purgative at night; the balsam of Tolu, liquorice-tea, the cowfoot, boiled together, with honey and vinegar of squills, will generally answer every intention. Chronic catarrh and other pulmonary complaints of negroes are very apt to degenerate into a permanent asthmatic disorder, for which I know of no remedy; it is aggravated severely by every change of weather with such certainty, that they actually become living barometers, and can tell the variations of the atmosphere long before it is indicated by any visible appearance. The attack continues for two or three days, and gradually subsides, leaving the subject much debilitated. Change to a lowland and dry situation is of the greatest service, and if possible the patients should be made to re-

side there permanently. I have repeatedly seen such success from a removal, as to render a negro, formerly thought of little value, a considerable acquisition to the proprietor. I have examined the lungs of several who have died from this complaint, after having laboured under it for many years. The substance of the morbid parts, when cut with the knife, emitted a sound that resembled cellular structure previously inflated with air: Water was uniformly effused into the cells. Women at a late period of life are more afflicted with it than others, and those that were left to themselves during the paroxysms recovered as speedily as when the most complicated preparations were administered.

SORE-THROAT.—Instances of croup and malignant sore-throat are extremely rare in the African race. They are, however, liable to inflammation of the *uvula and amygdaloid glands* in the severest forms. The palate enlarges (comes down, as they call it), and the throat is much inflamed, with more or less of troublesome cough and feverish symptoms. A mixture of strong peppers, in a green or dried state, is their favourite remedy on every occasion, and proves wonderfully successful; after a smart purge, and several trials of the wild sage, alum, penguin-apple, bark, and elixir of vitriol, the complaint is removed. We seldom find any unpleasant symptoms to remain except an enlargement of the glands or almonds of the throat; from repeated attacks of inflammation they become ulcerated, and acquire a morbid size, and remain so permanently; after every fresh return of cold they are covered with white superficial sloughs, which, though not dangerous, are very alarming, and so obstinate that every effort to reduce them proves unavailing. If the patient is young, and of healthy parents, the swelling will subside, as the individual advances, but too often in diseased constitutions it is the forerunner of those dreadful symptoms and ulcerations, which break out at a future period in the most morbid forms. Blisters, gargles, fomentations, are of little service. The morbid action proceeds gradually and fatally: This I shall fully illustrate when on the constitutional disorders of negroes, to which pages the reader is referred.

RHEUMATISM is frequent amongst negroes, though seldom to that extent as to require bleeding; it is chiefly of the chronic kind, affecting the muscles of the neck, occasioning what is called cricked neck, or the muscles of the chest, when it is often mistaken for pleurisy. The forms of lumbago and sciatica are the most com-

mon; exposure to the breeze, sudden check to the perspiration, night-air, changes of weather, are the usual exciting causes; their favourite mode of cure is sweating, which they practise to a great extent; for instance they warm the earthen floor of their houses by a large broad fire, then spread some bushes of esteemed virtue, and lay over them a mat, on which the person is laid and closely wrapped up with blankets. It is an African custom, as well as one which prevails in many other parts of the world, to pinch and knead the flesh all over where pained: The Chinese are said to be remarkably fond of this mode of treating rheumatic patients, and when persevered in it must undoubtedly operate in a powerful local manner. Dover's powders at bed-time, with one grain of calomel, for a few nights, effectually relieve chronic pains; the volatile tincture of lignumvitæ, with ten grains of camphor, warm bath decoction of the mezereon root, frictions, cupping, blisters, and strengthening plasters, may all be variously combined.

The natives boast of innumerable antidotes to chronic pains. When they come from the vegetable creation, and contain no mercury, we should never refuse to gratify them in their desires. They foment and steam the parts for a length of time, and are so anxious for their own credit, and that of their remedies, that they effect cures by proper perseverance, which would have been utterly impracticable in our hands.

Care is requisite to distinguish local pains from those that are the result of constitutional origin.

RUPTURES.

Ruptures are not uncommon. The nation of Africans, called *Mungolas*, are said to be extremely liable to the complaint. The hernia is generally that which passes through the ring, and is called *scrotal*. It acquires a most prodigious size when neglected at the commencement, and, from the adhesions that take place, it is not capable of being reduced, and remains incurable. Navel ruptures in children are owing to carelessness in not wearing a proper bandage when young; they are merely a deformity. When a rupture cannot be reduced by the usual means, and other symptoms are

threatening, immediate surgical assistance is requisite. The operation is dangerous in the extreme, and requires a person to be well experienced in the morbid changes which arise from a long continuance of the disease. Trusses are to be provided in those cases where the intestine is reducible, and worn constantly. Negroes are in the habit of removing these, and to prevent this a small padlock or fastening is requisite. It will preserve the truss, and save many from becoming permanent invalids. Congenital hernia, or where the infant is born with it, is very rare, and quite incurable, in general, except by an operation.

BURNS.

The nature of the various occupations, in which negroes are engaged, renders them liable to burns and scalds of the most extensive kind. These too often prove speedily fatal under every mode of treatment; occasionally they are aggravated by bad management; the action of fire and warm water is so rapid, that the structure of the parts is instantly destroyed, and any attempts to save these, as is practised by many, by the immediate and long-continued use of cold applications, will not only prove nugatory, but, when the injury is extensive and deep-seated, ultimately endanger life itself. The magnitude of the injured surface is what ought always to alarm us, not from the dangerous nature of the wound itself, but from the active sympathy that prevails with the internal and more important viscera. It is the violent reaction of these, the overthrow of that equilibrium, the existence of which constitutes health, which terminates life. On the third day after severe and large burns, a comatose state comes on, and there is great oppression in breathing, the denuded surface gets dry and hardened, the urine is generally totally suppressed, and the patient seldom lives after the fourth day.

After the dreadful conflagration of Drury-Lane theatre, many of the unfortunate sufferers were brought to one of the public hospitals. I had opportunities of examining the bodies of several, who died with the symptoms just mentioned. In all of them water was found effused into the cavity of the chest and ventricles of the

brain, proving clearly that, from the violent interruption to the functions of the cutaneous system, the internal parts had been oppressed and that, nature being unable to restore the healthy action by means of suppuration on the surface, these delicate organs could no longer carry on their operations.

Such being the case, the object which should ever guide us in the indication of cure is to remove the first and immediate painful symptoms by topical applications, and afterwards to excite by all the local and general means in our power a speedy and healthy suppuration on the wounded surfaces.

If the burn or scald is slight and superficial, and we see the patient soon after the accident, clothes dipped in Goulard's water, or vinegar, are to be applied, and renewed when the heat and pain return; at the end of ten or twelve hours these are to be laid aside, and a liniment made, by mixing olive-oil, or castor-oil, with lime-water, three ounces of the one to six ounces of the other, with a table-spoonful of spirits of turpentine, spread on a piece of fine linen, is to be placed on the part; this dressing may be continued till the formation of matter commences, when one of common cerate can be substituted. When the granulations are too luxuriant, they prevent the process of skinning; a strong solution of blue-stone water is necessary, and tight bandages; if any part rises higher than the rest, a few grains of corrosive sublimate, sprinkled on the surface of the plaster, will quickly reduce it; if the burn is near any joint, particular directions must be given to keep it in an extended position, as from neglect of this the part gets permanently contracted, and a severe surgical operation is necessary to restore it to the original state: This frequently happens to the knee and elbow joints of children, and renders them cripples for life.

When our patient has been superficially, yet extensively, injured by inflamed spirits, boiling liquids, or any part deeply hurt by the long continued application of fire, our treatment must be very different and immediate; for a few hours, cooling applications may be allowed to subdue the dreadful torture of the unfortunate person; ether and water are of great service externally; any extraneous substances are to be gently removed; but no attempt made to cut away the ragged portions of the cuticle; a purgative or laxative clyster are to be administered; after which we should lose no time in the free use of stimulating remedies, lest that degree of torpor supervene, which is uniformly fatal. Some caution us against the invasion

of fever as dangerous; I am convinced it is perfectly ideal; a necessary state of vigorous reaction forms a part of the progress of nature in her successful efforts to re-establish health, and, if it should so happen that the inflammatory process runs to a higher pitch than we could desire, effectual relief is always at hand, but is seldom required.

Let the injured parts be bathed in a most careful and gentle manner with warm spirits, mixed with camphor and oil of turpentine; we need not be accurate in the proportions; then apply the liniment of olive-oil and lime-water, adding a considerable quantity of turpentine and proof spirits, in which resin has been dissolved; it is to be spread on pieces of fine old soft rag, and renewed twice in the first twenty-four hours. When appearances are not favourable, the patient of a weak habit of body, or advanced in life, I never delay the application of large warm poultices after twenty-four hours have passed; the liniment may be increased in strength by more turpentine and spirits, as we think requisite; it is still to be continued; the poultices can be spread on any coarse cloth, and placed over the previous dressing: Of the advantages derived from this plan I can speak in the most decided manner from my own experience, and that of others who have been induced to adopt it in the most desperate cases. I would never despair, and, if we set our minds to see it effectually carried into execution, we give the miserable sufferer every chance for life; it is troublesome and tedious, but this is to be disregarded, and the satisfaction that is felt, when a person is conscious that his exertions have prolonged the existence of a fellow-creature, will amply compensate any temporary inconvenience.

These poultices are to be renewed every third hour, day and night, until suppuration appears, and is fully established: They are to be applied as warm as can be endured, and a spoonful of turpentine or two of strong proof warm spirits added to each; the under dressings need only be changed twice in twenty-four hours, and too much anxiety need not be shewn about washing the burnt surface: Negroes are very fond of stripping the skin, as they call it; this is to be always avoided. The materials for the poultices are to be such as are most easily had at the time, and in the greatest abundance, *viz.* boiled corn well mashed; the roasted contents of the calabash, which is excellent, and retains heat a long time; plantain-suckers boiled and bruised; oatmeal finely sifted; lily-root; roasted

oranges; cocones boiled: I have sometimes ordered the leaf of the coratoc roasted, and have seen excellent effects from it; but of these, and many others which can be combined, I prefer the roasted guts of the calabash; they may be taken of any size.

When the cuticle is merely abraded, and warm applications cannot be conveniently tied on, frequent fomentations are to be substituted, and the liniment as before directed; great care is to be taken, so that not the smallest injured spot is left exposed to the action of the external air; it immediately gets dry and hardened, and prevents the formation of healthy matter, if nature has any tendency that way: I have often witnessed such an occurrence where negroes obstinately pursue their own mode of treatment; they strip the poor wretch of every rag, and lay him on soft plantain-leaves, sinearing his body with oil: It is quite impossible to suppose these can defend every part, or adhere closely to the body, and the applications being neglected during the night the surface becomes brown and hardened, so that at the most critical period the operations of nature are thwarted, and the individual inevitably lost.

In desperate cases, where the powers of life appeared inadequate to keep up the necessary action, I have cautiously placed the patient in a warm bath, in the horizontal position; adding a gallon or two of spirits, and although the good effects were not permanent, nor ultimately successful, yet I conceived myself warranted in the conclusion that at an earlier period, and assisted by other remedies, the relief would have been effectual.

While prosecuting the plan now detailed, whatever acts by rousing the general functions of the body must be given internally at the same time. Wine, brandy, and the richest diet, are to be commenced immediately; two grains of opium and twenty of camphor every day in pills; bark in substance; ether and hartshorn in small repeated doses, and every thing that can be devised to promote and keep up the powers of life.

When we do not see the patient till some time has elapsed, the principles laid down and recommended should be instantly carried into execution, as affording the best chance for recovery; after suppuration has commenced, the stimulating dressings are to be laid aside, and the cure conducted on the usual plan for simple ulcers; in order to support the great discharge from such a surface the subject will require the most generous diet for a length of time; tight bandages will reduce the exuberant, granulating surfaces.

Y A W S.

An anxiety to investigate the nature and progress of this morbid poison determined me at an early period to turn my attention to it. The disgusting nature of the subjects, and the danger of infection, have hitherto prevented our obtaining an accurate knowledge of the stages of the eruption, and the laws that it follows in the human body. British practitioners have exclaimed against those in the West-Indies for this neglect, where, from its frequent occurrence, it might be so easily remedied; but in truth such patients seldom come under the eye of a medical man; they are sent to a distant part of the property, to be superintended by some old woman, who keeps their sores clean, and conducts them through the disease. If symptoms, called the dregs of the yaws, or some hereditary tendency, should have been called into action, they may be sent to a practitioner, but he has only one mode of practice, an alterative course of mercury, and that they *must* undergo; if one is not sufficient permanently to remove the complaint, a second is tried, the former not having been long enough continued: The extent to which I have seen this plan carried is dreadful, and I would not get credit if I related what has been told me by old practitioners. In former days the eruption no sooner appeared than, without waiting for its maturity, a course of mercury was commenced, not an alterative one, but pushed briskly, so as to induce a high state of salivation, which was kept up until the yaws left the surface. Luckily for the present generation, the confidence reposed in the virtues of this mineral has much diminished, and the charm that surrounded its all-powerful influence is dissipating every day.

The reader will, I trust, find mentioned in these few pages some facts that had not been previously ascertained, and others distinctly stated that were but imperfectly understood. The nature and progress of the morbid poison through the body is what I particularly wish to insist on, and to recommend to those who are anxious to acquire a just knowledge of the disease, as it will enable them to judge with correctness on the propriety of the present plan of treatment, and to decide on the utility of any remedy that may afterwards be brought forward.

He will be disappointed if he expects to find any thing original as regards the cure. When we once know that it has been introduced into the system, and must have a certain course before it terminates, all interference will be deemed pernicious in the extreme.

The eruption of the yaws sometimes commences without any precursory symptoms of ill health, but in general it is preceded by a slight febrile state, with languor, debility, and pains of the joints, resembling those of rheumatism. After several days minute protuberances appear on various parts of the skin; at first smaller than the head of a pin, but, in some cases, enlarging to the diameter of a sixpence, and in others even to a greater extent; they are numerous, and of the largest size, on the face, anus, and pudenda. Before the eruption comes out I have frequently seen the whole surface covered with a white scurf; it looks as if the skin was dusted with flour; it remains only a short time, and is succeeded by small pimples. In ten days or more the pustules get a crust on the top of them, and ill-formed matter can be detected, and a foul sloughy ulcer beneath. I have endeavoured to ascertain the period when the fungus shoots up, but it is quite irregular. I have found it as early as one month, and as late as three occasionally. It never shows itself at all in many of the ulcers. We cannot therefore assume it, as many assert, as a criterion whereby to judge of the commencement of the second stage of the disease.

It seemed greatly to depend on the constitution of the patient, and appeared sooner in those that were well fed. The crop is not completed at once. A new attack of fever will bring out fresh eruptions, while the earlier ones dry off: This is not, however, always the case, for the skin will be quite cleared from yaws, and the subject apparently getting into his former state of health, when he is a second time attacked with fever and pains, followed by a copious formation of pustules, which precede in the same manner as the first. Four of these successive eruptions are not uncommon, and the interval varies from three months to fourteen, causing the disease to be kept up for three years or more. The size of the yaw increases on each eruption, though the number is diminished: Experienced nurses can judge from this circumstance when the disease is near its termination.

When the throat is attacked the symptoms are extremely distressing; the ulcers resemble a piece of toasted cheese; they never

have any fungus, and, before the susceptibility is exhausted, the greater part of the palate is destroyed.

The yaws show a difference according to the subject. In healthy, well-fed people they are red, of a large size, and attain their acme much more rapidly than in weakly or diseased objects. When they are of a pale colour, small, not elevated, and bleed on the smallest touch, though not very painful, they never suppurate kindly, but discharge a thin fluid, which encrusts and alters the appearance of the fungus very much, unless it be washed off; in this state they remain for some time, the fungus gradually contracts, diminishes in height, and is finally covered by healthy skin. In general the yaw leaves no mark, except in those places where inflammation has gone very high, and then there is a broad, superficial scar, resembling the remnants of a scrophulous ulcer in a white person. The duration of the disease is various: Some will get rid of it in six months, especially children, others not till twelve. When several crops come out, it has been known to continue four years.— Ten months may be stated as the average time.

I cannot agree with Dr. Adams in considering the violence and susceptibility of the constitution for the disease to be in any ratio to its permanence, as it differs in this from other exanthemata; but conceive it merely to depend on the bodily strength of the patient when infected, for, in a few weeks, we can alter the most malignant form of yaws by a generous, stimulating diet. There are several varieties in the appearance of the eruption for which the negroes have distinct names, as the *watery yaws*, *ring-worm yaws*, *Guinea corn yaws*. The causes of these different shapes are obscure. The natives say the *skin is bitter for the disease*, and they regard the patient as liable to constitutional symptoms at a future period of life. One or two yaws of a small kind, discharging a watery humour, come out, and in a few months dry up; and every day we hear the parents of children referring their present complaints to this imperfect form of the disease, and I believe with great justice. We should therefore never omit making inquiries regarding the state of the eruption, and how long they continued on the surface, as our mode of treatment may be thereby judiciously directed. In what is termed the ring-worm yaws the number of eruptions is great, and at the most irregular intervals. I have a patient at present whom I have known for nearly five years, and she has had six distinct attacks during that time. I suspected a different disease at first, but I

have been repeatedly assured by those who, from their habits, are intimately acquainted with every variety, that it is yaws, and that such cases are by no means of rare occurrence.

There is a singular fact in the history of the yaws not generally known, but not less certain: A subject will get through the disease, yet have no eruption on the body: Negroes are well aware of this. There is generally a sore previously existing, or the morbid matter has been applied to that particular spot; the appearance of the ulcer is suddenly changed, the surface is covered with red, flabby granulations, which discharge a thick matter, that is renewed in a few hours after every dressing; the edges are elevated and defined, and usually of a circular appearance. In this situation the ulcer remains for many months, a constant drain is kept up, weakening greatly the constitution of the patient, until the susceptibility is exhausted, when the original state is restored; the person remains an invalid for life, for it is seldom that the ulcer heals after this period. The moment we are aware of the existence of this state of parts, not a moment should be lost in endeavouring, by every means in our power, to heal the sore, and to cause the yaws to come out on the body. Strong caustic applications, tight bandages, with some absorbent powder, will assist this. In one instance where I could not get the part to heal up, I ordered several punctures to be made on the body, with active yawey matter, which perfectly succeeded in producing the disease. The negroes call this ulcer affected with the yaws the *mamma-yaw*; it must, however, be carefully distinguished from the *common master yaw*, a name they also give to one or more large fungi that appear on the body during the course of the eruption, and remain much longer than the others, leaving a broad scar behind. It is generally imagined that there is never more than one of these at a time; but this is a mistake, as I have seen several on different parts of the body, and in each successive crop: They originate from the inflammation having acquired increased activity in that particular spot, and are by no means the places where the infection was originally deposited.

The morbid action and discharge from the ulcer usually frees the constitution from the susceptibility for the disease. On this, however, no reliance can be placed. I have repeatedly ascertained, and in another place detailed, cases where the action was merely of a local nature, leaving the subject, who imagined himself to have passed through the disease, liable to a further attack of it. It

is our duty, therefore, when they show themselves in a single patch, or attack some ulcerated surface, to endeavour to heal up the parts as speedily as possible, and, when that cannot be done, to communicate the infection by inoculation with active matter.

The patient is liable to other exanthemata during the yaws. I have known them to have small-pox and chicken-pox. I have repeatedly ordered yawey children to be vaccinated in every state of the disease, and they went through the different stages in the usual time. The sores did not appear to differ in any respect with regard to their time of healing. The small-pox, when it occurs in the latter stages of yaws, is said to clear the skin of the remaining eruption, which practice has been recommended by some; but I have had no opportunity of judging of it from the rarity of the complaint in this island.

The yaws affect the same person only once during life, the susceptibility being for ever afterwards destroyed. I have, however, the authority of my venerable friend Dr. Quier for saying that in some rare instances he has known the disease to occur twice, and at very long intervals: In one case, of a carpenter negro on Thetford estate, in the parish of St. John, twenty years intervened between the first and second attack. It is impossible not to place implicit confidence in the assertion of so discriminating an observer; and, from the acknowledged anomalies that exist in other morbid poisons, there is no reason to doubt their taking place in the present one.

Although the susceptibility is destroyed, there frequently happen very unpleasant symptoms to a person who has passed through the eruption: For example, a mother, who gives suck to a child with yaws, has the nipple excoriated from the acrid matter around the mouth; the irritation spreads, the wound deepens, and constantly bleeds; a foul ulcer is the result; in time the glands of the axilla become affected, and death is a common result: No person will receive the child, and if it is of a tender age, and incapable of receiving support by prepared food, it also perishes. The greatest caution is therefore requisite the moment any excoriation of the mother's breast is discovered, and the child has yaws around the mouth; *spoon-feeding* should be substituted, and other means, otherwise we endanger the life of the parent.

Another afflicting circumstance arises when the infant contracts the disease, without the mother having previously had it. I have

been obliged to witness several distressing cases of this nature. The sore on the breast, which first suffers, increases every day, discharging the most filthy matter, which either exhausts the patient, or she sinks from hemorrhagy. No one would require a medical man to operate on such an occasion. I have directed an expert negro to secure the bleeding vessels, but it invariably proves fatal, at least in every instance that has come under my notice.

I have endeavoured by every means in my power to find out whether the disease can be communicated to the child *in utero*, but without obtaining any satisfactory information. Reasoning from analogy, we might infer that the subject is protected, but experiments, afterwards to be mentioned, and other circumstances, have persuaded me that this is not the case, although old and sensible negro women will tell you, that the skin of such infants is for ever after rendered *bitter* for the disease.

Most affirm that it is only capable of being propagated by actual contact. I am inclined greatly to be of the opinion of Dr. Adams, that, when the air is highly impregnated with the diseased miasmata, actual contact is not required. On many estates I have known it spread in a singularly rapid manner, and attack negroes who, from their dread of it, had avoided every possible medium of communication.

There is not any author with whose works I am acquainted, who distinctly states that the disease is rendered milder or shorter by means of inoculation. The *latent* period, or that which intervenes from the time of infection till it appears on the skin, has hitherto escaped detection. These questions, of such importance in the history of morbid poison, the reader will here find for the first time satisfactorily answered.

A number of healthy children and others were removed from a mountainous situation to a sugar-estate. From there being no yaw-house, the children mixed together at meals, and at other times. Seven weeks after their intercourse three were seized with slight fever and pains, followed by an eruption all over the body; at the end of ten weeks the rest showed symptoms of the disease, and in eight months they had all recovered. This accidental experiment first led me to the idea of the artificial introduction of the disease. I was allowed to inoculate a child of three years old. Matter was taken from ulcers where the scab had been removed, and I saw it inserted in five different places; three of the punctures healed;

the other two did not; for three weeks they resembled scratches that proved irritable.

From that time small sores appeared, which increased until they became foul, sloughy, ragged ulcers; rather more than seven weeks from the insertion pimples came out on the forehead and over the body; the eruption was copious, and of the usual appearance; it was nine months before the child got clear of the disease. The original sores were longer in healing than the others; they never had any fungus that shot up, and differed from the secondary pustules by their constant discharge of a filthy, ill-conditioned matter; they both left broad, superficial scars. I may remark also that the child had a large *master yaw*, which proves clearly that the spots, where the infection is received, do not become the seat of this peculiarity, as some imagine.

In another instance, the small-pox having broken out in a mountainous situation, recourse was had to inoculation, and matter was taken from an apparently healthy negro girl, who had already been inoculated for the small-pox. It was inserted in the arm of only one subject. When the girl knew this, she came in great anxiety, and confessed she had the yaws. It could not be believed, for her skin was shining and healthy, but on lifting up the arm three sores were found in the axilla; the patient had the small-pox mildly; in two months the yaws appeared, and were neither milder nor shorter in their course than usual; the puncture made where the small-pox was received healed up in proper time, and all the secondary pustules were dried up before the yaws appeared. This case might lead us to conclude that the circulating fluid will produce the disease, but I have since found that such is not the fact, and that there must have been some undiscovered cause of fallacy in the example of the negro girl. I ordered five children to be tried with blood taken from a subject covered with yaws; the punctures healed immediately, and no effect followed. In this the yaws follows the laws known with regard to other morbid poisons.

Since the date of these observations I have had other opportunities of repeating similar experiments, particularly in cases where it was found desirable to introduce the poison without delay in the obstinate ulcerated *mamma yaw*, already alluded to; the results have varied but little, and all confirm the above statements; the *latent* period varies from seven to twelve weeks. A further prosecution

of this inquiry may enable us to fix it with more certainty. In particular subjects it will probably be found to be very different from what I have just stated. The medical reader will no doubt adduce the history of the Danish nobleman, as related in the valuable publication of Dr. Adams on *morbid poisons*, who broke out with yaws, although he had been *ten months* absent from the West-Indies.

I dare not venture to doubt the discriminating powers of that eminent physician, but we must remember that it was the first and only case he had met with, and his natural anxiety might have led him to refer other eruptions to this morbid poison. Many experienced gentlemen, to whom I have mentioned the circumstance, have ridiculed the idea of a latent period of ten months, and it certainly would present a strange fact in the history of exanthematous diseases. The extreme pain and severe ulceration of the throat rendering life, as he mentions, nearly intolerable, are symptoms so rare in the natural insensible state of the real yaw, that we are tempted to doubt the existence of the disease in the Danish nobleman.

My friend Dr. Quier is also of this opinion, and considers the eruption, as detailed by Dr. Adams, as only one of those crustaceous, cutaneous diseases, so frequently observed in the negro race and others. He says he has known these exhibit so deceitful a progress as to deceive the most experienced; and many young men have been accused of having contracted the yaws, and their prospects in life blasted by the premature judgment of some ignorant, officious pretender. Those most conversant with the eruption are occasionally mistaken, and it cannot be a matter of surprise that one, who had previously known it only by description, should also have been so.

I am perfectly convinced, after considering the evidence afforded by several trials, that inoculation does not render the disease milder nor shorter in its course, and that the only advantage to be derived from the practice is, that the subject can be chosen at a proper age, and his constitution so regulated as to enable him to support the debilitating effects of the poison in its progress.

Mr. Edwards, in his history of the West-Indies, says he was informed by a woman from Anamaboe, that the natives on the Gold Coast, in Africa, inoculated the yaws when young, and that the eruption is milder than when they catch it at a later period of life, and it is prevented from getting into the bone.

I have had this confirmed by several Guinea negroes, who were aware of my proceedings, and of my desire to shorten the severity of the disease by its artificial introduction. In their country it is thought no less peculiar to childhood than the small-pox is in Europe, but with this advantage, that they do not dread any fatal consequences from it; they buy it for their children in the same manner as I have already mentioned when speaking of small-pox: A subject, who has it in a mild state, being selected, and at a particular time of the year, all those of a certain age, whose parents wish them to have the disease, are infected, each giving a gratuity to the person from whom the matter is taken; various ceremonies are performed, which they imagine will produce a safe and speedy cure: From what I can learn they do not inoculate with the view of shortening the eruption, but from an idea that every one must some time or other have the disease, and, being aware of its dangerous consequences when it happens in after-life, they prefer passing through it in infancy, when it naturally shews itself in a much milder form.

It has been represented that the hairs near the yaws turn white, and remain so permanently: This I can positively deny to be the case in negroes; it is merely owing to the matter getting encrusted on the surrounding parts, and frequent washing being neglected. I have seen yawey pustules on the head of negroes, and, when cleanliness was made use of, there was no alteration in colour; the hairs were sometimes altogether destroyed, and when they did return were of the natural appearance.

In order to satisfy myself of the local effect of this morbid poison on such as had previously undergone the disease, I have ordered punctures to be made on the body with fresh active matter, and in every instance the wounds have healed by the first intention.

I have endeavoured to find out by experiment at how early a period the matter of a pustule is capable of exciting a similar disease, and at what stage it ceases to do so, but any information which I have as yet acquired has not settled the question in my opinion.

Dr. Moseley, in his *Treatise on Sugar*, says the yaws is of *bestial origin*, although that physician had numerous opportunities of observing the disease. I am rather inclined to suspect that in this, as in many other instances, he is mistaken, and also when he asserts that it is hereditary. Bajon, a German writer, mentions the circumstance of the virus of yaws as capable of being communicated

to domestic animals, and when it appears among the fowls it spreads so rapidly, that to check it those affected with the complaint must be immediately killed: Dogs, he says, are likewise liable to it, and with them it assumes the character of the venereal disease.

From experiments instituted for the purpose we know that the constitution of brutes is unsusceptible of the variolous, morbillous, syphilitic, and some other contagions. If the above fact were correct, it would present a singular exception to the acknowledged laws of morbid poisons in general.

Several years ago, in order to satisfy myself of the correctness of Bajon's assertion, I made it the subject of experiment on various animals, and the result in every instance has clearly proved that no such communication is possible.

Matter from a yawey sore was ordered to be rubbed on a raw sore in a young speyed heifer; the animal was prevented from licking it; the wound healed in the usual rapid manner; at the same time slight wounds were made in the nostrils, and the virus inserted, with the same nugatory results. Various attempts, which it is needless to particularize here, were made to introduce the poison into the bodies of dogs, rabbits, and Guinea pigs, without any success: Pigeons and domestic fowls were also made the objects of trial: Fowls, as well as pigeons, are liable to large swellings about the eyes and beak, which prevent the bird from feeding, thereby proving fatal; negroes call it the yaws. I have examined several that died from the disorder, and found it was nothing else but *chigoes* which caused it, from their not being extracted in proper time. Cattle are subject to an eruptive complaint, which is termed yaws; but it may be remarked that negroes give this appellation to every suspicious eruptive appearance either on themselves or the brute creation.

Dr. Grainger, as well as others, have asserted that surgeons on board slave ships were in the habit of repelling yaws when they appeared in the course of the voyage, so as to prevent its spreading further, and diminishing the value of the cargo. The repellents used for this purpose were a mixture of iron rust, gunpowder, and lime-juice, with sea water: The power of such trifling substances to effect this I greatly question, when the eruption of yaws has fairly established itself on the surface. From what we know of the nature of morbid poisons, artificial repellents could not operate

by clearing the skin in so rapid a manner, otherwise death would follow. Cold and other causes make the yaws *strike in*, as it is termed, but it is a process of some weeks, and fatal consequences inevitably ensue. I rather suspect that the mistake has become a general one, from the circumstance of attempts being made to drive back the disease when only one or two patches manifest themselves, it being an African custom; in cases where the mother-yaw is obstinate, and they wish it destroyed, the crust produced is removed every second day, and the sore rapidly contracts and skins over. I have applied to many in this island, who were intimately connected with those that dealt in slaves before its final abolition, for information on this subject: They uniformly answered, that they understood such a practice existed at that time, and that they knew of many pernicious frauds committed with purchasers, but that their situation gave them no opportunity of ascertaining the means which were used. A friend of mine lately shewed me a Guinea negro, on whom these repellent remedies were tried during the voyage: Shortly after he purchased him, the poor creature was attacked with the most dreadful pains all over the body, so that he was distracted at times; he explained, by means of an interpreter, the probable cause of his sickness, and what had been done to him on board of ship; suitable medicines were immediately given, and a copious eruption followed, with relief of every symptom. On questioning him lately, he told me the yaws came out *one, one*, and that they applied something that burnt his skin, and pained him much; they afterwards rubbed him all over with oil, and something black, and gave him for several days some stuff to drink, which made him very sick at stomach, and purged him severely.

Cure.

From the nature of the view we have taken of this disorder, the reader is not to expect any new set of remedies to cut short the tedious period that attends its progress: On the contrary, I consider it an important acquisition to our knowledge of this complaint, and of the greatest consequence to such as may hereafter be afflicted with it, that the less we interfere with the operations of nature the better. A venerable father of our profession has wisely said that a good physician never knows more than when he judiciously abstains from all medicines, and becomes a silent and attentive spectator of the efforts of the constitution. How happy would it

be for our species, if a numerous, busy, trifling race of practitioners had this maxim always before them ! How many a miserable, melancholy hour might have been spared to some wretched individual ! Nay, how many lives might have been saved, if they had been aware of its just value ! Like all other morbid poisons, the yaws has its *latent* period and stages of increase, maturity, and decline. When peculiarities of constitution do not prevail, they probably do not differ in any material degree. Each of these must be gone through before the susceptibility is destroyed. Vain and hurtful, therefore, are the efforts of those who wish to cut short its progress, or hasten its termination, by the administration of active substances. Why will we not be instructed by the very people with whom the disorder is indigenious ? Their ages of experience and daily observation must surely have revealed to them a store of materials, far exceeding any thing that Europeans can have collected : They never attempt to cure the disease, but only assist the powers of the body, and accelerate its actions, when debility may retard the progress to previous health.

In healthy subjects, when the eruption has come out copiously, no medicine whatsoever is necessary. Additional clothing, and diet of a fresh, nutritious quality, ought to be afforded them, particularly to children : They ought always to be made to work in a separate gang on large properties, but not to turn out too soon in the morning, or remain till the damp dews of evening begin to fall. In wet weather they should be excused altogether, and, where heavy showers of rain are apt to come on suddenly, huts ought to be erected to afford speedy shelter. A yaw-hospital on every estate is absolutely necessary ; it should be made warm and comfortable, furnished with a warm bath, and placed if possible near to water, but not, as on many estates, two or three miles from the works : This is done with the idea of removing the infection as far as possible from the other negroes, but it has quite the contrary effect, as I have had occasion many times to observe. There is not one nurse in twenty that can be depended on in such a distant situation ; the sick are allowed to escape at night to the negro-houses, and return, to avoid detection, in the cold damp before day-light. I could mention properties where yaws are more prevalent from this kind of arrangement, which is done from the best of motives, and attended with considerable expence. The house ought to be erected, as the local situation of the place may direct, at a convenient distance from

the other buildings, surrounded with a strong pallisado or fence, having a gate; the manager of the property must make it his duty to insist that some proper person see this locked every evening, and their allowances distributed, and the list again called in the morning. Much depends on the character of the person who is immediately entrusted with the care of them. It is a miserable saving to place a weakly, invalided nurse there; the most trusty, well-disposed woman on the property should rather be selected, and the provisions for their use placed under her care: She should assist in cooking their victuals, washing their clothes, and be herself allowed a very ample supply. When made in this manner strictly responsible, and confidence is placed in their exertions, we find not unfrequently that a conscious pride causes them to discharge their duties in a very correct manner.

These directions are applicable to such as have not advanced to the maturity of the disease. An exception in the general mode of treatment must be made with those who have arrived at the period of decline; indeed, it is impossible to prevent negroes, after they judge yaws to have attained their height, from applying their various favourite means of cure, and, as the dangerous time has passed, to refuse the gratification of their inclinations would only produce discontent without advantage. The preparations they employ are all of an astringent quality; some mildly escharotic; they assist materially in producing a contraction of the fungus, and healing of the ulcerated part. When, therefore, yawey sores are thickly encrusted, and do not manifest any disposition to go away, with considerable debility of the system, besides the most nourishing diet, warm bathing every day will prove of the greatest service; and, if we add a due proportion of sea-salt, the effect will be increased very materially; where opportunities occur, chips of the *lignumvitæ* will form an excellent addition, and they are much in esteem with the native Africans. Such as are under this treatment must be exempted from any labour, and every precaution adopted to avoid the effects of too sudden a transition from a hot to a colder atmosphere. When the eruption is backward, flowers of sulphur, combined with a few grains of camphor, the *lignumvitæ* with hartshorn,* sarsaparilla, China root, mezereon, the juice of the green wythe with longitudinal furrows.†

* See forms of medicines.

† Same.

When the patient is advanced in years, and the complaint proceeds slowly and unfavourably, then mercury is allowable, but in very small quantities: The alterative tincture is the safest form, and combined with other substances: The exhibition of it, with a view to clear the skin, as was formerly practised, should be held in the greatest detestation: Many of the dreadful tales related and horrid descriptions of years of sufferance are to be attributed to its premature administration: Still practitioners are prejudiced in its favour, and at present I know of several who boast that they can free any subject from yaws in the course of five weeks; but can they honestly say that the cure will be permanent? Some managers of properties, hurt with the loss of lives and labour, have at times listened to their suggestions, and given this powerful mineral, combined with the warm bath, sulphur, and warm clothing, at an early stage of the eruption: The general result, so far as I have ever understood, has been uniformly unfavourable, and lives have been sacrificed in order to convince ignorant men of their ill-judged officiousness.

REPULSED YAWS.—This is a most frequent and dangerous occurrence, and for the most part originates from a weakly habit of body, that is unable to throw out or support so debilitating a complaint. In consequence of exposure to the breeze during the operation of any active sweating medicines that are so often made use of, the eruption in a short time dries up, and the body swells, particularly the belly, attended with great pain internally: Few indeed are the instances of recovery that are effected from this state; they uniformly get worse, and die dropsical; in every case I have examined water was found in the bowels and chest; no time is to be lost in giving relief; the almost constant use of the warm bath, with sulphur internally, and the strong volatile lignumvitæ tincture, blisters to the chest and bowels, with stimulating frictions all over the body, wine and diet of a rich nature: Every remedy that determines to the surface is beneficial, but seldom are our exertions attended with success.

For the treatment of bone-ache, ulcerated sore-throat, and other symptoms, erroneously denominated the effects of ill-cured yaws, I refer the reader to the pages on the constitutional disorders of negroes.

Various measures have been recommended in order to diminish and ultimately abolish this horrid disease, which are now conceived

to be perfectly practicable from fresh importations no longer arriving from Africa. We must first root out the native prejudices from the minds of these uneducated people before any such idea can be realized, and it is a law in nature, which I believe has no exception, that when things are long in growth they are equally so in decay, though theory may say the contrary: At present on many properties, from an African notion, most children are intentionally infected with the complaint: They conceive that one day or other they must have it, and infancy is acknowledged to be the only favourable period.

Parochial institutions have been advised, but where a number of negroes are collected, such scenes of villany and neglect follow, that little benefit can be looked for from them. Attempts have been made to shew the necessity of these, by exposing the number of deaths and invalids that are occasioned by yaws. Dr. Sells, of Clarendon, a well-known practitioner, has I understand accumulated many facts on this important subject, but I am unacquainted with the result of his observations.

The only certain way of abolishing this disgusting disorder is to hold the subjects of it in abhorrence, and render it a matter of disgrace: With many well-disposed creole negroes this has already taken place; they would consider themselves as ruined in character amongst their associates, if they were to be attacked with it: Such a disposition should be encouraged in every way possible, and its gradual extension will ultimately operate more beneficially than any speculative considerations whatsoever, and render it, as it is now, an occurrence of comparative rarity in many situations.

CRAB-YAWS — There are two distinct diseases included under this name. The one is a painful affection, resulting from the fungus of the yaw finding difficulty in penetrating the hardened cuticle on the soles of the feet or hands; the other is a disease of the cuticle itself, and in no way connected with any previous disease.

The first named appears in the second or third crop of the eruption, and towards the decline of the disease; the thickened cuticle is to be removed by soaking in warm water and paring: A large soft poultice, frequently repeated, encourages their progress: Some advise that they should afterwards be cut out with the knife: The operation is painful, and not free from danger, as the tendinous expansion on the foot is apt to be wounded and inflamed. Dr. Chisholme

says, that the steam arising from the manchineel apple and wood effectually destroys after an hour's application. I have never tried this, but I have no doubt of its efficacy. Mercurial frictions continued for some time, and joined with gum guaiacum, will remove them. Lay on the diseased part, after being properly pared, a diachylon or gum plaster, sprinkled with corrosive sublimate; allow it to remain for two days; on taking off the plaster, the yaw generally comes out like a plug; if not, common dressings or a poultice bring it away in a few days; the strong nitric acid is an excellent application after the surrounding callous edges are removed; stimulating dressings will prove of great service; the sulphuric ointment, made with grease and oil of vitriol, is a valuable one.

The other disease, included under the term of crab-yaws, is an entirely different affection of the cuticle; and in no manner connected with the eruptive disease. It attacks those who never had yaws, and also grown up people who have had the disease in childhood, proving very troublesome and tedious. The natural thickened state of the epidermis on the sole of the foot and hand in the negro renders him liable to many disorders in the part: Partial inflammation occurring behind it manifests itself by a desquamation of the layers of cuticle. *Corns*, although confined in Europeans to the toes, attack every part of the foot in the African, and they make a general rule of calling every complaint in that part crab-yaws, without regarding any idea of infection. When it appears on the hands, layer after layer will come off for a length of time, rendering them very tender. There is no connection with a fungus, none ever being observed, except when a morbid growth shoots out from any lacerated tendon, a thing not uncommon.

The Cure.—It occasionally proves obstinate in the highest degree, in spite of the numerous remedies resorted to. With some it becomes so habitual, that during life they are never without it, more or less.

The sulphuric ointment already mentioned is the most efficacious remedy I know of: It acts locally, and dissolves the superfluous cuticle in a very short time, allowing a healthy action to be renewed; the nitric acid is also good; verdigrease, blue-stone, corrosive sublimate, mercurial ointment.

The favourite negro cure is boiling them. They place their feet in a large kettle, adding some particular bush or bark, generally that of the *mammea* or *hog-plumb*; here they soak them for

several days, increasing the heat as their feelings indicate. I have known some keep them in this situation night and day for a week. When taken out the whole cuticle separates like a glove, and they certainly for a time get rid of their complaint. I have known it to return after this operation. They wash with a bath of strong mamee-bark immediately afterwards, to harden the surface.— When this plan is permitted, a proper person should occasionally watch them, as in their anxiety to get rid of the disease they raise the temperature of the water so high as to endanger mortification and locked jaw, instances of which I have seen from this neglect.

LEPROSY.

The confusion that prevails at present in medical writings and books of travels regarding this disease is so great as to defeat every attempt, that can be made to unravel the numerous contradictions which are every where to be found. The most opposite diseases are at different stages classed under the same name, and again a mere accidental variety, arising from some locality, is considered as a distinct morbid affection. A great deal of this incorrectness has originated from authors, not of the medical profession, who, having had opportunities of witnessing it in distinct countries, have applied names to appearances without any regard to pathological accuracy.

The word *lepra*, which should be confined to a scaly disease, has been improperly applied to the real elephantiasis (a tubercular disease): This again, which has been so distinctly described by the Greek writers, has been, by the Latin translators of the Arabic writers, transferred to the local affection called Barbados leg, and for that it is now commonly used. The word *lepra* has been misapplied to the white diseases of the skin, called by the Greeks *leuce*, *vitiligo*, and by the Arabians *baras* or *beras*; in fact, I do not believe that there is a disease of the skin, varied as such diseases are, that has not by some one or other been termed leprosy.

The leprosy shows itself in numerous copper-coloured spots, dispersed all over the body, and attended with a great degree of insensibility: These continue to increase in size and number for many months, without occasioning any great alteration in the general

state of health. As the disease advances, the skin begins to grow rough and scaly; the features of the face become greatly enlarged, particularly the lobes of the ears, and above the eye-brows; the hairs fall off; the alæ of the nose swell, and become scabby; the nostrils ulcerate; the voice hoarse, and pronunciation nasal; ulcers break out on every part, and many of the joints separate; the breath is highly offensive; the subject ultimately becomes a living mass of putridity, and nature fortunately sinks under the weight of misery. Negroes seem more disposed to have violent attacks of this disease than white people: Luckily for those in this island, it seldom or ever now appears in the form I have described, which is the severest. When the exciting causes are avoided, symptoms of a very modified nature manifest themselves, and in my opinion are still, as I shall afterwards point out, to be met with every day, and to a great extent, though they are referred to a very different origin. Authors contradict each other in regard to its being contagious. After ulceration has formed most affirm that it is highly so: Whether this be the case or not I cannot say, having had few opportunities of observing the complaint. Its disgusting nature and appearance will certainly warrant separation, and have done so in almost every country where it has prevailed; and this circumstance, more than any other, has led to the idea of its being contagious, and caused the subjects of it to be held in abhorrence by every one. None can deny the melancholy truth of its being hereditary, and afflicting distant posterity. Dr. Wright says the children of leprous parents generally escape, but the grand-children are certain of the disease breaking out sooner or later in their lives. The children of white people, that have been suckled by negresses who have this taint in their constitution, are sometimes affected with leprosy. How cautious should a knowledge of this fact make mothers in selecting nurses to rear their children, when bodily health prevents their performing this most pleasant of all duties; and, if any thing can, this will assuredly rouse those dupes of fashion, who abandon their tender offspring to a stranger, and entail on their posterity the most loathsome of all maladies. As to the means of relief little is known; although the boasted list is numerous, reliance can as usual be placed on none of them. A strict vegetable diet has been enjoined in an early stage of the complaint, with what intention I cannot say. Mercury and antimonial remedies only irritate the disease, as has been proved whenever a fair trial has been given. Dr. Chisholme,

speaking of the fevers of Grenada, says the aborigines of the island use with the greatest success a plant, reported to be the *Saururus cernerus* of Linnæus, the *Aguarema* of M. Desportes.

Arsenic is said to have been long in use amongst the Hindoo physicians as a sovereign cure; they prepare it thus—one part of white arsenic, six parts of picked black pepper, which are beaten into a fine powder, and made into small pills; one of these is taken morning and evening, with the betel leaf, where it can be had; the body should be previously cleansed from all foulness by a repetition of cathartics. I have been informed that this substance has, on various occasions, been administered to a very great extent, and without success. I remember seeing a case in one of the hospitals in London, where it had been used largely, but without effect.

JOINT-EVIL, or COCO-BAY, is merely a variety of the leprosy, hereditary and incurable. After the toes and fingers have gone it frequently stops, and the patient enjoys good health for many years: This has led many to boast of the success of their efforts in checking the complaint. My friend Dr. Quier has used arsenic in this disorder for many years, to the extent of the fourth of a grain, combined with blue vitriol, daily: It may be increased to one grain gradually. He thinks he has seen benefit from it, and a stop put to the progress of the ulceration, while the patient was under its influence. In this form, therefore, or that of the arsenical solution, it is on all occasions worthy of a trial. I have known negroes to get fine healthy children while labouring under the disease,* and these have continued long free from any symptom of it, and according to old practitioners, have never shown any constitutional affection. Much more generally, however, it breaks out at one time or other, not always in the same form as that which their parents had, but in ulceration, bone-ache, and swelled leg: This subject I shall enlarge upon when treating of the constitutional disorders of negroes.

* Fowler's prepared arsenical solution—begin with six drops twice daily, and gradually increase.

ELEPHANTIASIS.

There are two varieties of this disease, which must be carefully distinguished. I have never seen them distinctly mentioned by any medical author, which is the more to be regretted, as a just knowledge of the subject leads to the most important conclusions in practice. The one is incurable; the other can be relieved by amputation, if submitted to.

The first attacks both white and black subjects; the latter, so far as my experience informs me, is confined to the negro race.

The former, from occurring so frequently in Barbados and these islands, has been termed the Barbados leg, and has been most accurately described by Drs. Hendy and Hillary in their various treatises. It is not confined to this part of the world: In China, amongst the lower class of people, it is not uncommon, and in the city of Cochin, on the coast of Malabar, it is peculiar, and hence throughout India it is called the Cochin leg. It is generally thought, from its coming on after an attack of fever, to be a deposition of morbid matter, effected by the operations of nature to get rid of the disease: This is not a correct idea by any means, for, although fever attends, it is more frequently the consequence than the cause of the attack. After it has subsided, a pain and swelling are felt in one of the inguinal glands, which becomes hard and inflamed: No suppuration ensues, but a red or dark coloured streak can be observed running down the inside of the thigh, from the gland to the leg, along the course of the lymphatic; the fever returns at very irregular intervals, attended with a severe cold fit, leaving the leg at last greatly swelled and turgid, with varicose veins; the skin rough and scaly, but no pitting on pressure; uneven lumps and deep fissures are formed, and ultimately the limb gets to such an enormous size, as to resemble the foot of an elephant; more or less time is occupied before the parts arrive at this state, sometimes three or four years; the patient will have an attack of fever twice during the year, attended with aggravation of every symptom; with others in six months the complaint will have reached its height, and the remainder of their lives will be passed with no other inconvenience than the immense load. In this there is every

variety; the disease seldom invades both legs in the same person; instances, however, of both having acquired a frightful size are not wanting: In black subjects the skin gets thickened to a great degree, and the papillæ grow to the size of quills; this renders the patient a much more miserable object, for the part bleeds on the least irritation, or exudes a filthy bloody ichor.

The arms and other parts of the body are rarely the seat of the morbid humour. Dr. Hillary, in his history of the disorders in Barbados, speaks of occurrences of this kind as having come under his notice. The monstrous size, to which the testicles grow in the island of Grenada and other places, appears to me to be but a variety of this complaint. I have conversed with several who have lived in the Windward Islands, and been informed that it is so common an affection there, that no attention is paid to it; that the enlargement is at first preceded by fever, and severe rigours, followed by swelling of the parts, which do not subside; after five or six of these attacks the patient will remain free from every complaint, and this swelled state continues for life; in some the testicles increase so enormously as to reach to the knees. It is very rare to find both testes diseased in the same person; they universally regard it as incurable, and do not attempt any operation, nor give any strong medicines: Before I was myself aware of the nature of this affection, I treated several patients in this island for schirrous testicle with very powerful remedies, both internally and externally; I need not say with what result: In one instance I proposed to the person to have the testicle extirpated, and, from the local nature of the complaint, I explained to him the advantages that would ensue from the operation; he could not help telling me, that if I was serious, he must form a very poor opinion of my professional knowledge, for that in the island he had resided in for some years, and where he contracted the disease, such a proposal would never have been made by any intelligent person; for most certainly the morbid humour would fly to some other part, and prove a much more dangerous malady than the present one: This gentleman had children in this island, and on my questioning him, he told me that he knew several in the same situation with himself, who had large families, and most healthy children. Dissections of the diseased leg show the adipose and cellular substance to be in a complete state of disease, and the muscles greatly wasted. I have examined the legs of three persons, and have detailed the appearances in a recent

number of the Edinburgh Medical Journal: The causes are quite unknown. The cure is equally so. Arsenic has been unsuccessfully tried; the plan of pressure as recommended is perfectly useless, and must have been suggested by one who had not any acquaintance with the nature of the morbid affection. Amputation ought never to be attempted.

The other variety I have now to mention, although termed elephantiasis, has in reality no connection in its nature with that just described: It seems peculiar to the negro race; it is not attended with fever or any constitutional symptoms, and is confined to the lower extremities; it comes on in a very gradual manner, appearing in patches in various parts of the foot, accompanied with a superficial ulcer that discharges a thin, ichorous matter; the surface is not scaly, but of a horny consistence, and the natural papillæ or pores are so enlarged as to acquire the size of small quills, and stand wide open, and bleed on the smallest application of any stimulating substance. The disease never extends higher than the ankle-joint, and is defined by a circle, as if a string was tied round the leg; it attacks both feet in the same individual, and seems to arise in consequence of neglected sores, and a bad habit of body. In negroes it is not unfrequently combined with the disease already mentioned, and adds greatly to the sufferings of the patient. I have examined the extremities of many on whom amputation has been performed, and preserved specimens, to illustrate the nature of the complaint: In all of them the epidermis and true skin were thickened to a great degree, and perfectly indurated; the deposition of matter in the adipose substance, though considerable, was nothing in comparison with that of the previous affection; the muscles were not wasted to that degree, nor were the lymphatic vessels injured in any instance.

When the complaint is of this local nature, attended with an ulcer, and the bodily health otherwise good, I never hesitate, if the patient readily consents, to amputate the limb, even should the morbid state have been of long standing. I never saw any bad consequences, nor did the disease attack the other leg. When of many years duration, a seton is proper for some time after the operation.

U L C E R S.

Every information connected with this important subject should meet with the earliest and strictest attention from those who have the charge of negroes committed to their care. The loss that is incurred from the prevalence of ulcers ought to stimulate every one to obtain a knowledge of their better treatment: They come under the immediate charge of the planter, and, if he is in any degree acquainted with the intimate union which subsists between the constitutional and local affection, he may render most essential service by a peculiar mode of proceeding, which might not otherwise have occurred to him.

I do not believe that the negro race is more liable than others to ulceration; their food, idle habits, or constant labour, are the causes that make them so frequently the subject of disease, and each of these circumstances must be taken into consideration in attempting a cure. I shall endeavour briefly to explain the different states in which we find ulcers, and the remedies suited to each; and, if the plan I am about to recommend be punctually followed, I have no doubt the number of invalids will be speedily diminished.

FOUL, SLOUGHING ULCER.—From neglect, a bad habit of body, and other causes, this form frequently presents itself; the edges are ragged and bloody, the surface hollow, and covered with a nasty slough, which bleeds in a very troublesome manner. After fomentations and washings a large poultice is to be applied, and renewed three times daily, or oftener, according to the situation of the individual. If the system is greatly reduced and mortification threatens, bark and wine are necessary, with other stimulants. The substances of which the poultice is to be composed are numerous: Powdered prickly yellow root, roasted oranges, scraped bitter cassada, pounded French physic-nut leaves, charcoal mixed with bark, myrrh, turpentine, or strong spirits, dunder, &c.

In a few days, by the continued use of these, the sore acquires a different appearance, granulations shoot up, and a common ulcer remains, which is to be treated as afterwards mentioned. Absolute rest is necessary, and the bowels are to be kept in a regular state; the diet is not to consist of any thing salt. Ulceration in

the nostrils is not uncommon, and at times it increases to an alarming degree. Small pieces of bone are passed, and there is a constant discharge of foetid bloody humour. The presence of vermin in such cases is always to be suspected; during the time the negro lies asleep from fatigue flies pitch on the face, and deposit their young, which instantly crawl up the nostrils, and lodge in the diseased part; they rapidly increase in bulk, and cause the most excruciating torture; they are not suspected till one drops out, when they will be found to have committed such ravages that the subject is often past recovery.

No time is to be lost in applying remedies. Inject a mixture of green tobacco-juice and turpentine every hour, hold the face over the fumes of dried tobacco, throw up sweet oil, with tincture of myrrh, or a weak solution of blue-stone water, snuffing up some dry, stimulating powder: It is seldom they resist this mode of treatment, which should be continued as long as any discharge comes from the nostrils; no force is to be used in endeavouring to pick them out with any instrument, as an obstinate hemorrhagy is apt to be brought on. The number that will drop out is astonishing. I remember the case of a stout negro man, who, during crop, had fallen asleep one day in the mill-yard. After suffering excruciating pains of the head one hundred and twenty came away in the course of six days; forty or fifty are not uncommon in children.

IRRITABLE ULCER.—The surface bleeds on the least exertion, and is extremely painful; the edges are irregular, and it continues to increase; every kind of dressing disagrees with it; the discharge is of an acrid nature, and irritates the surrounding parts, producing swelling and inflammation. Indolent ulcers occasionally put on this state, having rapidly changed in a few days. Negroes are not very liable to it, and, when it does occur, a general derangement is to be suspected in the action of the system, and this must be removed before the parts will heal: This is almost the only case in which I would recommend the trial of mercury; a mild alterative course, assisted with opium and bark, will probably restore healthy action, both generally and locally; the oxymuriate of mercury has been highly praised, for which preference I cannot see any reason. The action of this mineral will be greatly promoted by combining with it the lignumvitæ tincture, mezereon, and sarsaparilla. If any benefit is to be derived from the mercury, it will soon manifest itself by changing the appearance of the sore and nature

of the discharge, which will be thickened, with healthy, red granulations; if the mouth becomes sore, and no alteration is visible either in the general health or local complaint, we must stop its further administration; some push it to such an extent as to endanger life, and cause the most distressing and unprofitable sufferings to the miserable patient: There are but few of the negro constitutions that agree with mercury, and, where there is any tendency to hereditary leprous affections, the symptoms are not only aggravated, but the constitutional susceptibility is excited, and followed by universal disease; this is too commonly the case, and the dangerous consequences, which arise from the indiscriminate use of this valuable and powerful medicine, cannot be sufficiently impressed on the minds of those who have the management of negroes. When old ulcers break out afresh, they suddenly assume a very irritable state, and the ulceration extends in a rapid and alarming manner, until all the parts, that were formerly supplied by the healing process of nature, are destroyed: When its ravages cease, it gradually acquires a healthy aspect, and in time again fills up: This is the usual manner in which many ulcers proceed when the efforts of the system are not properly assisted; attack follows attack, until the parts get into that callous state, that a permanent ulcer is the consequence; whereas, if timely dressings and bandages had been applied, the subject might have recovered completely.

Where the ulcer discharges a thin, watery humour, the granulations are pale, and no attempts are made at cicatrization by the powers of the body, we should endeavour to move the system by internal means. When mercury disagrees with the patient, or its use is contra-indicated, I have ever derived the best assistance from the tincture of cantharides, taken for a length of time: Of the virtues of this preparation I have already made mention when on the subject of gleet and obstinate gonorrhœa: It operates powerfully in these cases, if carefully used, and not tried too far; the like success has attended it in ulcers having the character just described.

I have experienced its good effects on a large scale in one of the London hospitals several years ago, and have every reason to be satisfied where it has been tried with negroes in this island. Fifteen drops may be given twice daily, and the dose increased gradually to thirty, watching carefully every symptom; a week or a fortnight will often elapse before any sensible effects are produced; a slight heat and irritation in making water show that the system is gene-

rally affected; it is now to be stopped, and, if no amendment is perceived, we can renew it in a week or ten days.

I have repeatedly known it continued for a month without any change in the bodily health, but ultimately to prove beneficial: At other times, after using it for a few days, strangury and other unpleasant effects have followed; the utmost caution therefore is requisite in its administration, which should be directed by a well-informed person, to assist the operation; every additional remedy is to be employed at the same time, a decoction of the country woods, bark, wine, and, above all things, the patient is to be interdicted the use of salted meats; these are too often in a putrid state, for which negroes have a strange partiality; the diet is to be regulated, and every care taken to avoid spirits and any irregularities; indeed, unless the strictest discipline is maintained with such people, our best-directed efforts will be unavailing, even dangerous: Their night ramblings and parties prove the destruction of thousands, and are only to be avoided by having them properly secured.

I do not by any means approve of the plan commonly adopted of confining them in the stocks or shackles; it is injurious to their health, and apt to increase the ulceration, and also creates unnecessary discontent. When, therefore, it can with safety and propriety be dispensed with, simple confinement in a room is to be preferred.

I wish to be particularly understood with regard to the kind of ulcers most likely to be benefited by the medicine alluded to: They are such as have a thin, acrid discharge, a pale or irritable character, and shew no disposition to heal kindly, also where there is a general bodily derangement. I do not mean to say that the tincture of cantharides will promote the cicatrization of the ulcer: Our object should be to create healthy granulation, and, when this is obtained, it is to be laid aside, and a totally different course pursued: Let it therefore always be kept in remembrance, that every ulcer should be brought as quickly as possible to this state, so that we may not lose any time in having recourse to the invaluable assistance to be derived from proper pressure and bandages.

INDOLENT ULCERS. — Under this term, without regard to medical accuracy, I include all such as are of a chronic character, or that, having been previously in a sloughing or irritable state, have become filled with healthy granulations.

The number of these to be met with on some estates is an object, that ought to excite the most serious consideration. Negroes in the

prime of life are classed as invalids, and exempted from work, when, by proper applications, they might be made of permanent service to their owners.

From what I have observed, I cannot help expressing my sentiments regarding medical practitioners; they are certainly a great deal too negligent in their attention to this important branch of their profession: The interest of those that employ them is their primary object, and they never can forward it more effectually than by regularly inspecting such as are laid up with sores. Experience will teach them to pronounce in a summary manner as to the nature of the dressings, which may produce the greatest benefit; and the simpler these are, and the more they accord with the ideas of the negroes, the greater will be our success. Some look on this department as beneath their notice, and only fit to be entrusted to old women and nurses. A medical man, sincere in the desire for the advancement of his profession, would never regard any trouble that might ensue from attendance to these numerous cases.

Negroes have an idea that no remedy will heal their sores, unless they are allowed to have their own way: In general they have no anxiety to heal the ulceration, and continue to dress with some favourite bush for a length of time. In some instances the sore fills up with a broad, superficial, tender skin, the leg acquires a thickened state, and the disease breaks out with the slightest irritation: They dislike all bandages and adhesive dressings: The greatest impediment to success is this prejudice, which is universal, and renders it necessary for some confidential person, constantly to superintend them: They are also too fond of washing and rubbing their sores, leaving them exposed for a length of time, or partially covering them with filthy rags, which adhere to and increase the ulcer.

We should always, if possible, endeavour to prevent an ulcer healing by a broad, superficial cicatrix; the leg gets permanently enlarged, and a return of the disease is inevitable, rendering the person an invalid for life: How many objects of this description every where present themselves to our view, who otherwise enjoy good bodily health, and our regret must be increased when we know that most of them might have been prevented or cured, had judicious applications been tried in time?

The plan of treating ulcers by adhesive plasters and bandages, as recommended by Mr. Baynton and other surgeons, has been

justly called one of the greatest improvements in modern surgery. It is somewhat singular that so few have availed themselves of its assistance in this part of the world, especially for negroes, who furnish numerous and obvious cases, where it might be employed with the best effect. I do not know of another occasion in any department of our profession, where more certain means of relief could be held out than what are offered by this simple improvement, and those, who feel anxious for the reduction of the enormous list of such as are invalided from sores, cannot possibly have their views more completely forwarded than by exerting every endeavour to get it carried into the most perfect execution.

If this were to become general, I have no doubt but that in a short time we should have the satisfaction of seeing thousands restored to such a state as to enjoy the blessing of health, and prove of service to their masters.

Instead, therefore, of pursuing any longer the present method of simply dressing and keeping clean ulcerated negroes, and allowing the process of nature slowly to effect a filling up of the parts with a broad surface, when once we get a sore into a healthy, quiescent state, and the surface equally elevated with the surrounding parts, we ought to bring the edges as near to each other as possible, so as to diminish the extent of ulcerated surface, and imitate the natural contraction which is observed in healing parts, rendering the cicatrix as straight and narrow as we can: This is best performed by slips of adhesive strap, assisted by proper bandages.

The plaster is to be prepared by melting in an iron ladle four ounces of common diachylon, with half a drachm of yellow resin; it is to be spread quickly upon pieces of calico, by means of a spatula: As there is a considerable degree of dexterity required in this operation, which few are possessed of, I always prefer what is sent from England ready spread. When the ulcer is in a proper state, small slips are to be cut, of an inch broad, and convenient length; to make it adhere quickly, it should be gently heated; one end is then to be applied to the sound skin, about two inches from the lower part of the ulcer; we are to endeavour to bring the edges nearer by gentle compression, and drawing the plaster over the part; the other end is to be laid down in the manner slips are to be used, until the whole surface is covered; a piece of calico, three or four times doubled, must be laid over the affected part, and a calico bandage, two inches in breadth and three or four yards in

length, or rather as much as will be sufficient to support the limb from the foot to the knee, should be applied, with as much firmness as can be borne by the patient; it is to be passed first round the ankle-joint, then once or twice round the foot, and afterwards up the limb, till it reaches the knee, observing that each turn of the bandage should have its lower edge so placed as to be about an inch above the lower edge of the fold next below: Much of our success depends upon the proper application of this bandage, for unless it be even, and the compression regular, it will rather injure the patient; a little attention and experience will enable every one in a short time to acquire the necessary dexterity. If there is any pain or inflammation in the limb, the bandages may be moistened with cold water, and renewed as often as the heat of the parts indicates. The dressings are to be renewed only once in twenty-four hours, provided the discharge is not acrid, or in large quantities. I have frequently, in cases where the ulcer was extremely indolent in its nature, only removed the calico bandage, and washed away any slight discharge, allowing the adhesive strap to remain for two days. If this plan agree with the patient, at every dressing we will find the sore to have contracted, granulations of a firm, fresh, red appearance to have arisen, and the health otherwise much improved: The cicatrix, instead of being broad and pale-coloured, will be straight and narrow, and the new formed substance little liable to become again the seat of disease. Before a trial is determined on, the age, habit of body of the patient, duration, and situation of the sore, are all to be taken into consideration; an indiscriminate reliance will ultimately bring it into disrepute; the advice therefore of a medical person should be requested in the selection of proper cases.

To those of judgment and experience there will be no occasion to repeat what has been so often mentioned in the course of this work, with regard to the absolute necessity of restraining negroes while under medical care from indulging in their usual vicious habits. Those with sores are not considered as requiring any particular attention, and on many estates they are allowed a degree of liberty that defeats every attempt at a cure: They go on from day to day, and their being exempted from any laborious occupation renders them the less anxious about having the parts healed up. Unless a reform takes place in a radical manner in the management of such patients, no permanent advantage will arise from any

mode of treatment. I do not recommend strict confinement, and would abolish entirely the practice of placing them in the stocks. What is required is to prevent their irregular habits and night wanderings, to which all of them are so much addicted. When under the plan of the adhesive strap and bandaging, every attention is to be paid to their diet, and it will prove of the greatest service to allow them plenty of fresh provisions. Salted meats are highly injurious, and generally in a rancid state: What we do furnish them with should be of the soundest kind, and not in large quantities, but merely sufficient to season their vegetable messes which they know so well how to prepare.

Negroes from their occupations are liable to cuts and severe wounds. They have an abominable custom of stuffing these with lint and laudanum, which entirely prevents their healing by the *first intention*, as it is called. Sores frequently have their origin from this cause. When a cut is clean, and no ragged edges, a stitch should be used to bring the parts into contact, after which slips of adhesive plaster are to be applied, and the wound not opened till the *third day*, when, if necessary, they may be removed, and the parts will generally be found united.

MANAGEMENT OF PREGNANT WOMEN, AND DISEASES OF CHILDREN.

It is the obvious policy of all West-India proprietors to render negro women the objects of their peculiar care, so as to ensure their becoming mothers, and rearing a healthy offspring. The irregular habits and dispositions of these people present lasting obstacles to this desirable purpose, which, however, it is the serious duty of all, who are entrusted with the management of them, to obviate as far as lies in their power. Every encouragement is to be given to such as settle early in life, and raise a numerous family.

The great reasons why the strength even on the best managed estates is not kept up from the increase of children, as in other countries, are evident to every observer. On some properties some prevail more than others, but the following will be found to be the principal: Hereditary leprous affections, which appear at and

before the age of puberty; the early and promiscuous intercourse of the young females; their great aversion to become early mothers inducing attempts at abortion; obstinate menstrual obstruction; mismanagement in previous labours; locked jaw, and suckling the infants for too long a period; and we may add, where it is established as a custom on many properties, their early exemption from labour. On each of these I will say a few words.

Leprosy, although uncommon in a severe form amongst the negroes of this island, nevertheless shews itself, as I have already mentioned, in a modified manner, and to a very great extent in the present generation: Such cases are generally looked on as the effects of the venereal disease, and are most erroneously treated accordingly; the child thrives, and appears healthy, till near the age of puberty, when there come on swelling of the bones, ulceration in the throat, with loss of the palate, and other serious symptoms, which resist every plan of treatment. The number invalidated from this cause is great. For further information the reader is referred to that part of this work, which treats on the constitutional disorders of negroes.

The early and unbounded indulgence in venereal pleasures is a common cause of sterility. The parts are left in so morbid and relaxed a state as to be unfit for impregnation; the uterine and vaginal vessels are distended, and a perpetual discharge, or *fluor albus*, is the consequence, and it is not till many years have elapsed, and they become attached to a particular person, that they begin to breed, bringing to life a weakly, diseased offspring, that perish in a short time, or prove incapable of propagating their own race. The mothers, by their having previously contracted disease, and injured their constitutions from excess at an early time of life, cease to breed and menstruate long before the regular course of nature arrives. Many young females, from peculiar prejudices and an aversion to relinquish their former habits, whenever they find themselves pregnant, endeavour to procure abortion by every means in their power, in which they are too often assisted by the knavery of others. The effect of these repeated miscarriages operates dreadfully on the tender frame of the mother, and not unusually terminates in death, or incapability of future impregnation.

From the rough treatment the mother meets with in difficult labour, the parts are occasionally so severely injured, with prolapsus of the womb, that she is rendered incapable of breeding again: The

bones of the pelvis are partially separated, and the ligaments thrown into an inflamed state, with weakness in the loins.

Planters every where find pregnant women most difficult to manage. They have so many prejudices, so many wants, that it is impossible to satisfy them: Their situation they well know prevents any chastisement from being had recourse to, and in consequence they are extremely insolent, and it requires great forbearance to submit to their conduct. A little policy is absolutely requisite, and much firmness in insisting on their performing whatever duties are required of them. Most of them, when they miss the regular return of their monthly sickness, report themselves pregnant, and require an exemption from the regular labour in the field. On many estates by particular orders this is immediately granted, and after the fourth month, no work whatsoever is required from them, but they are allowed to sit down, and bring forth the child, which too often proves the offspring of a very *lengthened* pregnancy. Indulgence of this kind, though it may arise on the part of the proprietor from a sincere desire to benefit his slaves, is totally misplaced, not only by its introducing habits of idleness, but also from its materially injuring the person to whom it is granted. Nature does not require such exemption from exercise during that state, and, in truth, with most of them those hours that we conceive to be passed in ease and relaxation are employed in carrying heavy loads of provisions, or in distant journies, for the advancement of their own interest.

If we think proper before the fourth month of pregnancy to separate them from such as are engaged in the most laborious duties on the property, whatever we exact from them should be of a constant nature, avoiding of course stooping and the raising of heavy loads: This may be farther diminished as the woman advances; but, to the latest period, she ought to be regularly seen, and made to use gentle exercise: These considerations are liable to many exceptions, and it rests entirely with the discriminating judgment of the manager to determine in whose favour they are to be made. If the woman is well disposed, far advanced in life, has borne many children, or is liable to miscarriage, early indulgence ought seldom to be withheld. In a first reported pregnancy great caution is required to prevent abortion.

When women find they are mistaken in the idea of their being with child, or are determined to impose on their overseer, they pretend to say they have had an abortion, or that their belly has

wasted, and they have lost their reckoning; they produce some bloody discharge in evidence, and seldom fail to establish their imposition: This is practised by some for a length of time, and, unless put a stop to, is attended with very dangerous consequences: A faithful midwife, who will not connive at their proceedings, is the only person to put a check to it, and, when the guilty are detected, the punishment ought to be exemplary: When repeated instances occur we should be on our guard, and, when the woman has been any time pregnant, what is passed must be brought for inspection.

Bleeding is a favourite practice with some, and they have it performed secretly. I am always averse to it, except in cases where women have previously had miscarriages at a certain period, when it may be useful.

We are not to judge of the period of pregnancy from the mere appearance of the mother: This is most deceitful; some do not show belly, as they call it, till a few months before they are delivered, while others, from a peculiarity of constitution, seem far advanced even at the fourth month. Immediately after conception the womb descends into the vagina, and from this most women date their reckoning, though they are often mistaken a month or six weeks; but it soon ascends again, and emerges from the pelvis. In the first pregnancy the abdominal muscles yield less readily, and the bulk is much less forward, than on future occasions; about the fourth month the womb may be felt through the abdominal integuments, springing out of the pelvis; in the fifth month mid-way between the pubis and navel; in the sixth as high as the navel; in the seventh half-way between the navel and pit of the stomach, and in the eighth quite at the latter place; at the ninth the womb begins to subside, so that at the time of parturition it is not higher than at the seventh month; this shews a disposition in the uterus to act favourably, for if it remain high and tense previous to delivery, the labour will be very tedious and dangerous. Fortunately for this race of people cases of bad labour are rare, for when they do happen the termination is generally fatal. To describe the different stages, and the efforts made by nature to expel the child, would be superfluous here: It will be sufficient to caution the midwife against trusting too much to her own exertions, and neglecting the application for other assistance, to which they have a great aversion. If the child presents itself irregularly, convulsions threaten, the labour

pains suddenly cease, with considerable discharge of blood, not a moment is to be lost in sending for a medical person; the midwife should be strictly forbidden even to attempt turning the child when it presents itself unfavourably, or to use any violent means for dilating the parts and hurrying on the labour; the natural pains are to be waited for; no active stimulating drinks of any kind, a few drops of laudanum at most; the membranes are not to be ruptured too soon: Thousands are sacrificed from an officious interference; they have no confidence in the workings of nature on this or on any other occasion. The after-birth, if it does not immediately come away or yield to gentle measures, is not to be rudely handled, for fear of hemorrhagy; a few hours delay is of no consequence, but after this period proper assistance is to be called: They have a custom of tying a string to the *funiculus* or *cord*, and fastening it to the woman's toe, at the same time obliging her to retain her breath, or blow strongly into her hands: When this fails they apply a tight bandage, and endeavour to excite vomiting and sneezing, make her stand upright, and shake her violently, giving her large draughts of cold water to drink: All such proceedings are to be avoided: When, from debility and other causes, a *sand-glass* contraction, as it is called, takes place in the womb, with retention of the placenta, there is extreme danger, and the best assistance often proves unavailing.

As to the question regarding the propriety of having a lying-in hospital on every property there can be no doubt, and it ought to be enforced on every occasion: The superior accommodations, the quiet so necessary for the mother and infant, the cleanliness which can be observed towards them, regular diet, and the dressing of the umbilicus, are objects of the first importance. I would recommend that the lying-in room be separated from the hospital for the sick: This is a point of the greatest consequence; if possible, the house of the midwife should be adjoining, and if she is a careful person the entire management of them may be left to her care; an ample supply of child-bed linen is to be furnished them, particularly bandages for the navel; the frocks are not to be made too long, as they are apt to be soiled by the urine and fæces; fires made in the middle of the room are strictly to be forbidden, and abstinence from every kind of spirits and other irregularities. They are extremely addicted to gossiping, and the use of strong liquors, which they even administer to their infants.

Notwithstanding the obvious advantages held out by the institu-

tion of a lying-in hospital on every estate, separate from the other establishments, yet the prejudices of those we have to deal with are of so old and deep-rooted a nature, that they prove superior to every exertion of authority, and any attempts at reasoning are fruitless and inconsistent with the mental capacity of such uncultivated people.

When an unfortunate case happens on a property in which the mother has been obliged to remove to this habitation, the clamour is so great, and the dread of future mischance so strongly impressed on their minds, that nothing but compulsion will enforce our orders. On many estates, where lying-in hospitals are ordered as part of the arrangement, I have known this to happen, and be followed by the most dreadful consequences. When there is not a regular place for this purpose, I have always recommended a plan, which, though not so certain in its effects, is preferable to allowing them to be delivered in their own houses.

The midwife on every estate should have a house built for her, of superior construction, with one or two spare airy apartments, with regular fire-places and chimnies, and other necessary accommodations, such as bedsteads and curtains: To these apartments the pregnant woman is to be removed shortly before the expected time of her delivery, and placed under the sole direction of the *grandee*, as they call her. If she is a person of respectable character, I have never found the smallest objections to this change: They may be indulged with their own furniture, and it will be no loss to the property, if we allow some one of their own choosing to attend them in the latter stages of pregnancy, and for several days after they are brought to bed. Here they have an opportunity of seeing their friends, and receiving those congratulations, that are so numerous on such occasions, and may yet be kept under a proper degree of restraint.

Childbed fever is almost totally unknown amongst negro women, as are likewise other dangerous symptoms, common to Europeans at this period: After-pains are to be relieved by oil and an anodyne draught; a tight bandage should be applied to the belly; the diet of the mother ought for some time to be extremely simple; wine in a diluted state will be beneficial to those of a weakly habit of body.

It is an African custom not to permit the infant to suck the mother immediately after birth, but to give it to some other woman for three or four days, until the mother's breast become quite dis-

tended; some allow the first week to pass over before it is given to the mother; the injurious nature of this practice need not be pointed out, and must be strictly prohibited. With most women in twelve or eighteen hours there is a copious supply of milk; warm fomentations will hasten its descent, should it be backward. The abundance of this secretion in negro women is astonishing, and proves occasionally distressing; Some I am certain could afford a supply for three infants at one time, without injuring their constitutions: To relieve the uneasiness it causes they actually gorge their children with it, and frequently excite bowel complaints; from this arises that eruption so prevalent with children; few are without it, and the mothers pay no attention to it whatsoever, as it wears away in a few months.

The most distressing consequence is mammary abscess. From the violent distention of the parts inflammation ensues; a painful hard swelling, which suppurates; from the ulcer there issues a constant discharge, not only of matter, but of milk; this weakens the patient greatly, and all our efforts cannot stop its progress. When any hardness is perceived, with throbbing pain, let the breast be suspended, and cold applications made use of; rags wet with Goulard's extract; *cold poultices* and nitre; frictions, with oily mixtures; all irritation, from allowing the child to suck, is to be carefully avoided; when the mother loses her child while yet young, the breasts are to be regularly drawn for some days, otherwise dangerous symptoms will result from the sudden revulsion of so great a secretion: Many have excoriations of the nipple, which prevent their nursing, and the child, when kept too long at the breast, occasionally destroys it altogether; in such cases nipple-glasses must be provided. The dangerous consequences that ensue to nursing mothers, from allowing infants with yaws to suckle them, I have already particularly pointed out, when speaking of that disgusting disease: Ulceration, and even death, have been known to follow it.

The only other observation I need add regarding breeding women is the length of time they continue to suckle their children: If permitted they will extend it to two years, or until, in their own phraseology, the child can bring its mother a calabash full of water. Among most savage tribes this custom prevails, owing no doubt to the whole care of the children devolving on the mother, who is afraid to be burthened with a second offspring before the first can dispense with her continued attention. In the second chapter of

the Alcoran it is ordered that women shall suckle their children *two entire years, if they will suck so long*: This may be proper in a prudential point of view, but it proves Mahomet to have been but a poor physician.

The mother's health is greatly injured; if she is liable to any constitutional disease, it will most certainly be called into action; there are numbers that never recover from keeping the child too long at the breast; they fall into a consumption or emaciated state, in which they linger for a few years. Nature never intended a woman to nurse more than twelve months; the rapid growth of the child, the developement of the teeth, and altered state of every function, plainly indicate that food of a very different nature is now the proper stimulus for its further improvement; besides, we know that nature has fitted women to become again pregnant in *nine* months after delivery. In the West-Indies the exemption they obtain from labour is a sufficient inducement to make them continue this injurious custom. After ten or twelve months all indulgence ought to be stopped, and we are to insist on the child being weaned, and even long before that period of its being accustomed to food of another description.

Treatment of Infants.

When the labour has been tedious, the child appears weakly, and the signs of life are obscure, we should caution the midwife never to divide the navel-string until respiration has fairly commenced, and by no means to hasten the separation of the placenta. Numbers that are said to be *still-born* I am convinced might be saved, if speedy assistance were given. The causes of the apparent cessation of life in new-born infants are various: Weakness of the vital powers; the introduction of some of the waters into the wind-pipe; congestion by a twist in the navel-cord; it is to be well cleansed and wrapped in warm flannel; the chest rubbed with strong warm spirits, and hartshorn poured on the face and temples; if these means fail we must introduce a small pipe into the nostrils or mouth, and endeavour to inflate the lungs: This plan must be pursued for a length of time, and assisted by the warm bath: When the breathing is laborious, and there is rattling, we are to suspect the presence of some fluid in the trachea; the infant is to be held in a situation so as to have it evacuated as speedily as possible.

When the navel-string is to be cut, let it be divided at one stroke, by means of a clean sharp razor (which the midwife is to keep constantly in a proper state for that purpose), about two fingers' breadth from the body: Care must be taken to separate it from the body by the intervention of fine soft rag; a mixture, of one part laudanum, one of turpentine, and two of sweet oil, spread on a piece of surgeon's lint, which, to please their fancy, may be partially burnt; over this a moderately tight bandage is to be placed; and the parts not dressed till the second day, when the same application is to be renewed, adding more turpentine and a little powdered bark; it must be dressed every day afterwards, till the ninth or tenth, when the bandage is to be considerably tightened, to prevent umbilical rupture: This is very common with negro children, and sometimes it acquires the size of one's fist; it originates entirely from neglect of due pressure; some prejudiced negro women encourage it from an idea that the larger the rupture is, the genitals will become proportionably greater. When the milk of the mother does not come down freely, and the meconium has not been passed by the infant, a little sweet oil and syrup will be of service, with one or two drops of laudanum: This is always to be preferred to the usual negro plan of putting the child to the breast of a woman that has old milk; sometimes a severe purging follows, as might naturally be expected.

They have an abominable way of cramming the poor infant, shortly after it comes into the world, with oil, rum, sugar, and other mixtures, to carry off the matter lodged in the intestines; the injury sustained from this mode of proceeding is serious; the natural milk of the mother is quite sufficient for this purpose on every occasion: Unless we have a sensible midwife, who is superior to and can overrule these prejudices, the mortality will still continue great amongst negro children: The clothing for the first eight or ten days ought to be very light, and easily taken off; the infant is rather to be kept warm by good coverings, for they get so quickly soiled and wet, that they require to be shifted several times a-day: This is a most important consideration in the prevention of locked jaw, and the mother should have no excuse on the ground that she has not a sufficient supply. Sudden and early exposure to the breeze and external air, and hot confined rooms, are to be strictly guarded against. In damp situations and rainy weather a fire is indispensable, but it should always be made in an adjoining room.

TRISMUS NASCENTIUM, OR LOCKED JAW OF INFANTS.

This disease, from many considerations, is the first to attract our attention, and it has been calculated that nearly one-fourth of the negro children born in the West-Indies die from it: After the ninth day we seldom find any one attacked with it, but if it invade on that day, the subject may linger till the fourteenth; there is no great variety in the symptoms; the infant on the sixth or seventh day refuses the breast, and appears uneasy, with frequent yawnings and stretchings; the body and limbs become quite straight, but convulsions do not always appear; the first approach of these is indicated by the fingers being bent inwards, the nails becoming livid, sudden twitches of the head, and a fixed look in the eyes; after a short time these increase, and rapidly destroy the infant; the jaw is not always fixed; I have seen the child suck till within a few hours of its death; the spasms seize every part of the body indiscriminately, in the most partial manner, and we are often astonished to see death ensue after they have commenced but a few hours, without any degree of violence. The disease has no right to be called *jaw-fall*, for that symptom rarely supervenes; and when it does, it is only during the last stages, and in consequence of paralysis.

The discrepancy, which prevails amongst the best medical authorities as to the cause or causes of this fatal malady, is the best proof of our ignorance regarding its origin, for not two agree in opinion, although they have had the amplest opportunities of judging. The majority are in favour of the irritation being produced from bad treatment of the navel, and say, that where the dressing has been properly attended to, no case of the kind has occurred: But how will these reasoners explain the fact, when in Africa the disease is unknown, and the navel treated by the actual cautery, and little or no attention afterwards paid to it? I have myself examined the bodies of many who have died after the funis has dropped: Healthy suppuration had been established, and none but the most ignorant could attribute death to so trifling a cause. The wood smoke is a favourite idea with others of experience, particularly with Dr. Clarke, in his Treatise on West-India Diseases; but, as Dr. Win-

terbottom justly remarks, this custom is prevalent all over Africa, where the disease is *unknown*; and, he adds, not a single instance of trismus in infants, or of tetanus in adults, occurred during his residence in Africa, and to the natives it was quite unknown. No greater reliance is to be placed in the opinion of those who refer the complaint to retention of the meconium as a general cause. I have known many instances where the greatest punctuality was observed in keeping the bowels in a free state, yet it proved unavailing.

Wet clothes too long retained about the infant, sudden exposure to the breeze, a damp situation, and giving old milk to the new-born child, have each been considered by various individuals as exciting causes, with what justice it is impossible to say. To no one set of causes can it therefore be referred; each of these has been avoided by those interested at different times, but still the mortality has not abated in the least.

It will prevail on a particular estate, and yet be totally unknown on the adjoining one: In one year many will be cut off, whilst in others it will be comparatively rare: In some parts of this island it is stated to be very uncommon, and there are districts where scarce a child can be raised; in towns less of it is seen than in the interior: Some particular families are subject to it; I have known several instances where a negro woman has successively lost every child by it, and where, from the anxiety and respectability of the parents, no care was omitted that might exempt them from the attack. In such cases, I have recommended removal to the lowlands previously to the woman being delivered, and complete success has attended the measure. It may therefore be tried with such people as a matter of experiment, for we ought in such distressing circumstances to catch at every expedient that promises the most distant hopes of relief.

When on the subject of locked jaw, I mentioned that in several instances I had examined the body after death, in order if possible to ascertain the manner in which the complaint acts in disorganizing the delicate internal structure: In every examination more or less redness and enlargement of the blood-vessels was found in the spinal canal, and on the surface of the cerebellum or little brain, with a tendency to watery effusion: The course of the nerves also exhibited evident marks of increased action. I made a particular point of carefully dissecting the navel, and in none of the subjects that came under my notice was there the slightest appearance of any thing

that could warrant me in referring the disease to that quarter. I have also repeatedly opened this part, without examining any other; and where death had not taken place till the ninth day not only was healthy matter found, but the healing process nearly completed.

Whenever an infant dies before or on the ninth day, it is invariably ascribed to trismus. Now there are many other causes which operate equally obscurely, but fatally, at this tender age; and, as the last stage of all infantile diseases is attended with convulsions, they are promiscuously classed under one denomination. This is a common mistake with all popular reasoners, which must make us receive with some limitation the reports of extensive mortality.

As to the *treatment*, when the symptoms have invaded, little is to be expected after this period from any of our remedies: Every case invariably proves fatal on the third or fourth day.

If we suspect the bowels to be affected, a tea-spoonful of sweet oil, or a solution of manna with syrup, and a few drops of laudanum, may be given; a small blister to the nape of the neck, frictions with oil of amber, warm spirits, turpentine, &c. to the throat and jaw, and also all over the back and abdominal muscles: The warm bath is what I chiefly rely on; the infant is to be kept there for ten minutes at a time, and wrapped up carefully when taken out; two drops of laudanum every three hours will perhaps be of service. Where suspicions of locked jaw are entertained, Dr. Wright, in his notes to Grainger, says a grain of calomel every third hour is to be repeated: In such a case any thing ought to be tried, but I doubt greatly whether my friend Dr. Wright ever experienced any benefit from following this prescription. I have been informed from the most respectable authority of some practitioners having given three drops of laudanum and one grain of calomel every day, for the first nine days, to infants born on properties, where they could not rear a single child, and yet trismus has ensued on or before the ninth day, and proved equally fatal as formerly.* A French writer remarks, that in many of their

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* It has been affirmed, as a medical axiom, by those of the highest authority, that in tetanus and fevers, when the patient's constitution is affected with *mercurial action*, no further danger is to be apprehended: The following case, which, with other observations, will appear in a *future publication*, is a melancholy proof of the contrary.

Since the previous part of these pages went to the press, a singular case has occurred to me in this parish, which it may be useful to communicate.—August,

colonies the mortality is immense, so much so as entirely to do away with any attempt at rearing the offspring of their slaves. From an idea that the action of the external air is pernicious to the infant, they anoint the surface with oil, for the first nine days, and much success is said to attend their practice: Although the theory may be incorrect, the effects in preventing the admission of damp and chilly breezes will operate as a preventative to this fatal complaint: In situations, therefore, where these causes exert an active influence, the use of oily frictions ought to have a fair trial, combined with other remedies and preventative means. I have with this intention made use of it, but have no positive evidence to lead me to say with any marked advantage: The subject is open to so many sources of fallacy, that little reliance is to be placed on any of our practical deductions. The great source, from whence we are to look for a diminution of the mortality from this disease, must originate from a strict adherence to every direction to prevent the action of the exciting causes, for, after these have established their influence, all our efforts are vain.

In situations where the complaint is prevalent, the establishment of a lying-in house, and the utmost perseverance in all our proposals, are matters of the greatest consequence. A midwife, of a trusty and upright disposition, will prove invaluable: Indeed, every thing depends on this point being obtained, and, if we adopt the plan of removing the pregnant women to a suitable room in her vicinity, it is a matter of greater necessity.

She has it in her power to prevent all those causes from operating, which I have already mentioned as giving rise to this affection — regularity in dressing the navel, and evacuating the *meconium*, frequently shifting the wet clothing, and avoiding sudden exposures to a damp, cold atmosphere, or wood-smoke.

1820, William Otto, a stout tradesman on Dove-Hall estate, had a rusty nail run into the sole of his foot, nearly an inch in depth; it was removed, and the wound properly dressed with laudanum; mercury was given immediately, combined with opium, in small doses, so as to affect the mouth, and large poultices were applied to the foot; he complained of some stiffness in the jaw on the third and fourth day; these symptoms, however, went off entirely; suppuration of a healthy nature was completely established in the wound, and the mercury affected the mouth to such a degree that it was deemed proper to stop it, and continue only a pill of opium and camphor regularly; things went on favourably till the thirteenth day, no further danger being entertained in consequence of the favourable appearances, when strong spasmodic twitches attacked him, and in twenty-four hours he died, in spite of every remedy applied in the most careful manner; the jaw was not firmly closed at any time.

HYDROCEPHALUS, OR WATER IN THE HEAD.

Soon after my arrival and commencement of practice in this island, I was not a little astonished to find the partial degree of attention that was given to the disorders of negro infants and children, and how little they seemed to be understood by the generality of practitioners. It is a known and valuable fact, that almost all the diseases of infants, of an internal nature, terminate in the destruction of the functions of the head: The superior developement of this part, and the peculiarities of its anatomical structure, would naturally lead us to expect such an occurrence.

An early attention is therefore necessary to prevent this fatal determination, for such it always proves. I confess I find it very difficult to explain to a person not of the medical profession the mode of attack of this insidious disorder: The utmost attention and observation of every symptom are requisite, in order to discover the threatenings of such a tendency, and the varied shapes it assumes at the commencement baffle the longest experience: This is augmented from the secluded state in which negro children are generally kept, and the very imperfect relation we can get of the symptoms from those who attend them.

The earliest symptoms are an unwillingness and uneasiness in raising the head, and a desire to lie down again immediately; the child is constantly drowsy, peevish, has irregular flushings of fever, and requires some exertion to rouse it from an apparent state of *stupor*; there is vomiting, loss of appetite, beating of the temporal arteries, an aversion to light and sounds, the bowels for the most part costive; if the child can explain its feelings, the head is referred to as the most affected part.

After these symptoms have continued for a longer or shorter period, a remarkable transition takes place, which denotes what is called the commencement of the second stage. The patient screams without being able to assign any cause, and starts suddenly in its sleep; there is considerable dilatation of the pupils, which do not contract on exposure to light; there is double vision, torpor, slow, unequal pulse, and belly most obstinately costive; a fatal termination is in-

quainted when the pulse returns to a febrile state, uncommonly quick and variable, coma, squinting, and convulsions. There is great irregularity in the succession of these symptoms, or what have been called the stages of the disorder: A child will be suddenly seized with convulsions, whilst apparently in good health, and be destroyed in four days; at other times no very urgent symptom will show itself till a few hours before death. The obscurity of this subject is much increased by our seeing the patient so seldom, and obtaining at best but an inaccurate report of what may have passed since the last visit: The general duration is from three to four weeks, dating from the first symptom.

When recoveries have actually been effected in hydrocephalus, after effusion of water has taken place, we ought probably to attribute them more to the efforts of nature than to the interference of art; but by an early recourse to antiphlogistic means, during the inflammatory stage, we may sometimes succeed in removing the disorder: In most instances it is to be regarded as difficult of cure, and the chance of this is in proportion to the duration of the symptoms.

When the patient cannot bear to be raised up in bed without great uneasiness, it is a bad symptom; so is deafness, which is often mistaken for stupor. When the dilatation of the pupil of either eye, or squinting, is very apparent, or the pupils of both eyes are much dilated, a fatal termination is denoted. Apoplectic stertor, coma, with loss of sight, enlargement of the head, cold extremities, difficult respiration, intermitting pulse, are unfavourable. The opportunities I have had of watching this complaint in negro children have not been numerous. The symptoms are not of such an urgent nature as to create immediate alarm, and therefore a medical man loses the only period at which he could offer any hopes of relief. In most of the cases my distinguishing the disease was merely accidental, and from observing a repetition of those indications which I well knew from a melancholy experience to be so fatal to European children. That it is a frequent cause of mortality amongst negro children I have not the smallest doubt, and also in general but little attended to.

To the constant and long-continued irritation, produced by worms lodged in the intestines, I attribute the origin of this complaint on most occasions: The sympathy that exists between the healthy functions of the intestines and brain is so strong, particularly

in children, that we need not be astonished at such a trifling cause in appearance exciting these fatal consequences.

The singular prevalence of worms in the negro race affords the best argument in support of my opinion as to the frequent occurrence of water in the head. I have opened but few subjects where the disease was of an idiopathic nature, but in these the presence of water and enlarged blood-vessels denoted clearly the previous inflammatory action. I can, however, speak with more confidence of those cases of sudden death which originate from worms. I have preserved a detailed account of many of these morbid examinations, which it is unnecessary to bring forward here. The result sufficiently proves that in every instance, where the head was opened, more or less water was found in the ventricles of the brain and spinal canal, according to the duration and severity of the previous symptoms.

Treatment.

In the first stage this must vary according to the symptoms which are present. If there be any increased inflammatory action in the vessels of the brain, local bleeding will be necessary: Leeches are not to be procured in this country, and therefore we must resort to cupping the temples, or opening the jugular vein, which is by far the most efficacious in this complaint: If the patient is eight or ten years of age, opening the temporal artery will be advisable.

The repetition of blood-letting must be regulated by the continuance of the symptoms of increased activity. Purgatives are particularly indicated, as worms are always to be suspected as the exciting cause, and the determination to the head is also thereby lessened; small doses of calomel, aloes, gamboge, nut-oil, will be proper, and to be repeated at short intervals, according to the nature of the evacuations; frictions all over the belly and clysters occasionally. In every stage of the disease, let the cause have been what it may, blisters appear to be highly advisable, from the great discharge they occasion from the vessels of the head, and with this view we should apply a cap blister over the whole head, keeping up a copious discharge from it as long as we can; when it heals, fresh ones may be put on the forehead, occiput, and sides of the head in succession; a few powdered blister flies mixed with the dressing, to keep up a proper irritation. I would recommend a mixture of mercurial ointment to the blistered surface.

Cold applications to the head, as linen cloths wetted in vinegar and water, are to be renewed as often as they become warm and dry. The use of mercury, so as to excite what is called the mercurial action in the system, was formerly strongly recommended, but it is now abandoned by the generality of practitioners for the mode of treatment I have pointed out. Fox-glove is a very doubtful remedy, and, indeed, in this island no confidence can be placed in any preparation of it, as it speedily loses its peculiar virtues.

Negro children are much less liable to those fatal complaints that carry off so many of the same age in cold latitudes. After speaking of trismus and water in the head, any further remarks need only be of a very general nature. Their disorders, although not often fatal, require much attention and experience in order to treat them judiciously; close and repeated observation being the principal means of supplying the want of that assistance, which the personal information of adult patients generally affords.

Little is to be learned from the state of the pulse and urine, much more from examining their eyes, tongue, breathing, particularly cructations, stools, and the feel of the belly, restlessness, and startings during sleep:

Eruptions of the most varied nature are common to infants, and are seldom attended with any dangerous consequences. It ought to be a general rule to wash the body daily in tepid water, and to pay great attention to the state of the bowels. Active preparations of sulphur or other remedies that determine to the surface are always to be avoided.

The *red gum* appears over all the body shortly after birth, and the more copious the less danger is to be apprehended from it.

Crusta lactea, or *milk blotch*, is not confined to the scalp merely, but universally pervades the body. Few negro children, as I have already mentioned, are without it; the mothers pay no attention to curing it, it being in their idea a symptom of good health; it is kept up by their giving the infant more milk than it can actually digest, and nature takes this method of relieving herself; as the child advances, and teeth appear, it gradually wears away.

Excoriations and *runnings behind the ears* are never to be hastily dried up on any account, as convulsions will follow.

Watery gripes, &c.—Bad milk; weak digestion, too much animal food, creating acidity, are the usual causes: The legs are drawn up

to the belly, which is hot and swelled; the infant often places its hands there, and leans forward; the stools are green and watery, excoriating the parts, and passed with much wind; eruptions not unusually come out, and give relief to every symptom; a gentle puke, if the case is urgent, afterwards small doses of rhubarb, magnesia, with a few drops of some essential oil, followed by the chalk mixture; changing the mother's milk; but more particularly a diet of sago, arrow-root, and soup, are indicated.

The *stomach cough*, as it is called, and difficulty of breathing, with which many children are seized, with fetid breath, arises in most cases from a disordered state of the bowels. The oppression at the chest is often so severe as to excite considerable alarm. Blisters and pectoral remedies are tried without benefit, when probably a puke or gentle purge would have removed every symptom of complaint; the former is attended with the best effect in such cases.

Convulsions.—The causes of these are numerous: Dentition, sudden striking in of eruptions, acidity, and particularly worms: They are exceedingly alarming, and require speedy assistance. We must inquire into every symptom that has preceded the attack. Immediate immersion in the warm bath, and a laxative clyster, a tea-spoonful of hartshorn, and frictions with warm, stimulating substances over the body; if teething is suspected, the gums are to be divided; if a rash suddenly repelled be the cause, blisters and repeated warm fomentations; instead of the warm bath the dashing of pailfuls of cold water over the patient's body is more generally resorted to, to relieve present fits, when other remedies fail; the success attending this plan I have often witnessed in a remarkable manner.

Inward fits are much spoken of by nurses. The child appears as if it were asleep, but the eyelids are not quite closed, and if you observe them narrowly you will see the eyelids twinkle, with the whites of the eyes turned up. There is a kind of tremulous motion in the muscles of the face and lips, which produces something like a simper or smile, and sometimes the appearance of a laugh. As the complaint increases the infant's breath seems now and then to stop for a time; the nostrils are contracted; there is a dark circle about the eyes and mouth, which comes and goes by turns; the child starts, especially if you move it ever so gently, or if you make the least noise near it, it heaves a deep sigh and passes wind, which gives relief for a while, but presently it relapses into the dozing;

at other times it struggles hard before it can pass wind, and seems as if falling into convulsions. Sensible nurses do not give any remedies for these symptoms; they take up the child when it sleeps too long, and rub its body smartly, holding it before the fire, and moving it up and down in their arms: This generally causes a discharge of flatus, which removes every symptom.

The facility with which the period of dentition passes over is a singular fact in the history of the negro race. Seldom or ever does it become the subject of a practitioner's consideration, but as the colour approaches the white, infants suffer more severely from it. Scarification and opiates are effectual remedies.

REMARKS

ON
**The Constitutional and Hereditary Disorders of
 Negroes.**

The delicacy of organization renders the human species liable to a great variety of derangements in the action of the various organs which compose the body. Some of these are of so acute a nature as to terminate existence in a short time, while others attack more insidiously, and are opposed in their progress by the preservative powers of the system. Climate, food, and occupation cause the characters of these to vary in every region of the globe. In each country they have a peculiar appearance and mode of treatment, and not a few of the numerous errors on this subject have originated from our indiscriminately applying the knowledge we have obtained of our own to those of a different race of people, and in distant parts. All being subject to disease, and anxious for the re-establishment of health, are apt to transfer their own knowledge as applicable to the cases of others. Medicine, therefore, must be always a popular science, and influenced by popular prejudices.

According as these have happened to prevail, it has been under the dominion of such as assumed superior sanctity of life, of witchcraft, or barefaced quackery. In all its revolutions it has never failed of being associated with ignorance and error. This was never more completely exemplified than in the history of constitutional and hereditary disorders; their every day occurrence attracts common attention, and the slow progress they make, and the varied symptoms they assume, are apt to lead the most cautious and experienced into error.

In Europe, where they have been investigated by men distinguished for their talents, the laws they follow have been ascertained, and means of relief adopted, founded on lengthened experience. But in this quarter of the world the case is sadly different. No medical authority that I know of has even attempted an explanation of their hereditary disorders. A few general statements are all that can be found, and these mostly rest on hearsay evidence.

Yet how could it be otherwise? Where are the individuals who have shewn themselves capable of conducting such an inquiry, which, besides the rare qualification of a spirit for observation, requires a lengthened residence, continual intercourse, and even personal sufferings, before we can presume to say we have even made an attempt at accuracy? All we are at present possessed of are the hasty, superficial remarks of transient voyagers, who visited such shores for any other purpose but that of the advancement of knowledge.

I cannot promise that any thing like an exposition of this important subject will be found in these few pages. My residence has been too short in this island, and my experience too limited, to allow me to say that I have made any advancement in this inquiry worthy of being recorded. All I shall endeavour to do at present is to shew that the popular opinion on this point is generally erroneous, and that the facts lead to very different conclusions from those at present entertained; that the terms poxed, rotten, ulcerated, and the like, are improper, and proceed from our adopting a theory, the prosecution of which is attended with fatal consequences. To recede in our pretended knowledge of any point is painful to most persons, except to candid minds, who consider it a real advancement. Among such we shall find those to be the best informed who confess they know the least.

The constitutional disorders, incident to cold and temperate climates, are of a very different nature from those that afflict the African race.

Consumption, madness, gout, serophula, and its numerous consequences, with various other organic hereditary derangements, are almost strangers to the inhabitants of tropical climates. There leprosy, and its dreadful effects, rage in a manner but little known to European physicians, who, reasoning from their previous and local information, transfer their ideas to objects that have in reality no relation to them. Before the introduction of the venereal disease, leprosy was referred to as the source of every cutaneous affection. This made the venerable professor Pitcairn, who lived before leprosy was quite exploded, or before it was thought useless to consult the older writers, observe that since the introduction of the Neapolitan disease leprosy was no more mentioned.

Syphilis has now entirely usurped its place. Every symptom, that seems the result of a disordered constitution, is referred to that

origin, and with this melancholy addition that mercury can obviate its progress, and even eradicate it entirely. To such a height has this arrived as a popular opinion, that no miserable creature can present himself, exhibiting the slightest indication of a general affection, but it is instantly placed to the account of venereal infection, and he must undergo a course of mercury; and if that is not sufficient, a second is to be tried, and a third, but more generally the death of the patient saves all further ill-directed efforts. I shall chiefly endeavour to shew the mistaken idea that is entertained with regard to this important consideration, as the present mode of proceeding affects the lives of thousands of our fellow-creatures. I cannot accomplish this more effectually than by exhibiting in a brief manner the nature and progress of leprosy, as described by the best authors:

It would not be attended with any practical advantage to enter on the present occasion into an investigation of the nature of the different modifications of leprous affections, as described by various medical authorities. The confusion now prevalent has been introduced, as I have already mentioned, by travellers and others, not possessed of professional habits, who have applied the most improper names to mere varieties of the same affection, which assume an altered appearance at different stages. It requires the medical reader to be possessed of the most extensive information and discriminating judgment, to enable him to form any thing like an accurate idea of this complaint. With the popular reader any such attempt would be fruitless, and only increase the confusion. As to its being contagious, it is a matter of opinion entirely. The seclusion of such miserable objects, who, fortunately for this island, are now rarely to be met with in a virulent state, would suggest itself at once as the obvious policy of every humane proprietor. The hereditary nature of the disorder, which no one questions, is another reason for enforcing this injunction.

Such chronic diseases as leprosy, which seem to arise spontaneously, and which never yield to the unassisted powers of the constitution, must have their origin in climate, predisposition in the patient's constitution, peculiarity of diet, or probably in all. If the first and third causes only exist, we may hope for relief from change of climate and mode of living; but if the disease never occurs, except where there is an original predisposition, the cure can only be permanent as long as the patient is removed from the

exciting causes. As the predisposition is born with the patient, the inference follows that he must have derived it from his parents: Pushing this idea too far, we form extravagant notions of hereditary diseases: We do not consider that unless the complaint can be traced back to our first parents, and thus involve us all, it must have originated in one whose ancestors were free from it. Leprosy originates in some instances with an individual, and ceases with him, and cannot be traced to his immediate offspring: More frequently it is quite the reverse. In all those cases, where I have had an opportunity of making correct observations, they have been attacked at or before the age of puberty, when they seemed to have derived the disease from their parents, and at a much later period of life, and in very different forms, when it originated with themselves; this last, however, appears to be a very rare occurrence. From the best information we can procure, it would appear that children and adults are attacked with the disease, yet their parents and grand-parents have been free from it. From whence could this predisposition have originated but from the parents? This is not peculiar to leprosy. The English consumption will prove fatal to many a numerous offspring, whose parents will survive them to an advanced age. To produce a still more familiar instance, how frequently do we find a striking resemblance between the brothers and sisters of a family, yet none of them shall show any similitude to either parent, and this when the chastity of the mother has been above all suspicion.

From this it follows that no constitutions, but such as are predisposed to it, will produce the disease: That though the predisposition is more to be apprehended in those who are born of leprosy parents, yet it is not a necessary consequence of such an event, and it is often found in those who are born of healthy parents. If, as it has been asserted, the disease is much less frequent with those who use a generous diet, it is probable that where a predisposition exists, it may be prevented from coming into action by climate or liberal nourishment. This question is extremely doubtful.

When the disorder can be traced to a diseased parent, the dreadful symptoms break out at an early period, and in the most varied form. If before puberty, the genital organs are never developed, nor is the person capable of propagating his species. If children of evidently diseased parents escape at the age of puberty, we have every reason to hope that they will remain so for life.

Dr. Heberden, who had frequent opportunities of observing the disease, mentions that he never heard of any one contracting the disease from a leper by contact, though he witnessed the daily communication of lepers with persons who were not affected with the disease. He mentions instances of leprous husbands cohabiting several years with healthy women, and having children by them, without communicating the disease, although the children have inherited it. In such families some of the children have the disorder, while others escape. He knew of a family where the father lived and died a leper, and of two sons and two daughters who survived him, though at present each of them is advanced in years, the youngest daughter alone has shewed that she inherits the disorder. The eldest son, though sixty years of age, has never discovered in himself the least symptom of it, yet his only daughter, about eighteen years of age, has been for some time affected with it. Thus suppressed, but not subdued, we see that the *fumes* of the complaint may *lie dormant a whole generation*, and awake with full vigour in the succeeding one.

The forms, which it assumes in certain persons in a particular district of country, are of the most opposite nature and appearance, and would lead one to imagine they had a distinct origin. The bones of the palate and soft parts will be entirely destroyed, and here the ravages seem to stop. With others the fingers drop off, and the body is covered with dreadful ulcerations and large fleshy swellings. The skin has a singular, mottled appearance, and is thickly set with large white scales. Dr. Maundrell, in his journey from Aleppo to Jerusalem, says it not only defiles the whole body with a foul scurf, but also deforms the joints, particularly those of the wrists and ankles, making them swell with a gouty, scrophulous substance, very loathsome to look upon; their legs resemble those of old battered horses that are often seen in the drays in England. Where the predisposition is strong, but by a generous diet and other means care is taken to avoid the exciting causes, the hereditary tendency will only manifest itself in the most partial manner, as by a few discoloured spots or distortion of the bones of the leg.

Children of a weakly habit of body, even although every care be taken of them, infallibly get the disorder when predisposed to it. The rich are not attacked by this distemper. It confines itself to the poor. Those who can afford fresh meat and other necessaries during the year remain free from it, and it is somewhat singular

that during years of scarcity, and where families have suddenly been reduced from affluence to a comparative state of poverty and misery, the complaint has manifested itself amongst such as thought themselves entirely exempt from it.

In countries where a gradual improvement has taken place in the manners and mode of living, this most disgusting of disorders has greatly abated, and is to be found only among the most wretched, and even then in a milder state. As to the causes, they are reckoned of the most opposite nature. Every nation where it prevails attributes it to those that are the most obvious. A diet of fish or milk, and the use of stagnant water, have alternately had their share of blame.

That excellent observer Dr. Hillary, in his Treatise on the Diseases of Barbados, has justly observed, that although this disorder, as well as the venereal disease, be situated in the constitution; the latter is cured by the different preparations of mercury, yet with the former, so far from being cured, every symptom is aggravated by mercurials. It seems to abate the distemper for a little time, but it soon returns with almost double force and violence, and ultimately destroys the patient. Antimonials, which are of little service in the venereal disease, operate powerfully when given early in leprosy.

These few observations will I trust convince every one of the varied modifications which this disorder assumes, and of the permanent misfortunes entailed on a distant progeny. From the best authorities I can with confidence affirm that no advantage will result from the administration of mercurial preparations: On the contrary, the complaint will be rendered more inveterate: To this fact I particularly wish to direct the attention of those entrusted with the care of such miserable objects.

If we examine the particulars that are detailed of those cases of *lues venerea*, which have been accurately observed and described by men of excellent experience, as they have occurred in Europe, we shall not find any correspondence with such as have now been mentioned either in themselves or offspring. The constitutional symptoms of the venereal disease, if not speedily checked, in a short time destroy the life of the individual; the ulceration is marked by so positive a character, that there can be no doubt regarding it. Proceeding in a uniform course, it daily gains ground, and shows no tendency to the formation of healthy granulations, unlike that of leprosy, which

tantializes the patient by frequently shewing a disposition to put on the kindest appearance of healing, and then breaking out with its former virulence. In the history of the venereal disease we do not find any instance where the hereditary affection manifests itself at the age of puberty, without previous constitutional derangement, to a greater or less extent, and that of the most obvious nature.

Children born of parents, who actually labour under the disease, show symptoms within a very short period, and these generally prove fatal, although every exertion be used. Ulceration does appear at the age of puberty, but it can be referred to a very different cause from that of syphilitic infection.

Let us now attend to the manner in which leprosy attacks those resident in the colonies, and who have derived the tendency from persons of African origin.

That severe and disgusting form of it, which I have already spoken of, is now rarely met with in this island. Some practitioners have informed me, that although they have resided many years in the country, they have never met with a single instance of it. In the other islands I understand it rages with great violence, and, where intercourse with the negro race has taken place, it has appeared in those of fairer complexion.

The children, the produce of a diseased parent or parents, are born to all appearance of the most healthy structure, and remain so for some years after birth. About eight or nine they begin to pine away, the belly becomes prominent, they complain of severe pains in the bones and joints, the latter swell, and are stiff and painful when moved: The throat is affected at a later period; the uvula and glands or almonds of the throat become enlarged permanently, and covered with superficial ulcers; every slight variation in the temperature causes them to inflame and enlarge; gargles and blisters give no relief; the voice is hoarse and guttural; the internal part of the nostrils gets enlarged, and a sore is formed, which no efforts can heal; a superficial white-coloured spot appears on the roof of the mouth, which gradually spreads with deepening ulcerations: These symptoms, with swelling and distortion of bones to a greater or less degree, show themselves in those unfortunate beings, who are born with a strong predisposition, or where the exciting causes have been allowed to act in an unrestrained manner: They commence at the age of eight, and as late as puberty. If they remain free till this period has passed, they are very seldom

afterwards attacked with it in any form whatsoever; and, if in any, it is in that of the elephantiasis or big leg, rarely the *coco-bay* or joint-evil.

According as the complaint is restrained by proper remedies, warm clothing, and generous diet, it proceeds with corresponding rapidity. Where the hereditary tendency is not strong, and care has been taken of the subject at an early period, its progress will be stopped for a time, and if near the age of puberty altogether overcome.

At other times an ulcer will break out in some part of the body, and remain permanent, leaving the patient, however, free from other constitutional symptoms.

A more melancholy fate generally awaits these miserable creatures. The soft parts of the nose and palate swell, inflame, and ulcerate; tubercles in various parts of the body, particularly the forehead and bones of the feet, with the most excruciating torture; the uvula and spongy bones of the nose and palate come away in succession; the ulceration extends in every direction with extensive loss of substance, and frequently alarming hemorrhagy; the character of the ulceration has no resemblance to that of the venereal, no hardened elevated edges, nor strongly adhering white-coloured slough. Contrary to it also, it at times stops in its progress, assumes a healing aspect, and for a while deceives the credulous subject with the hopes of renovated health; suddenly a relapse comes on, and the patient sinks under the weight of accumulated misery.

In some of a good habit of body, after the soft bones of the nose and palate have been destroyed, the parts heal up, and the disposition is not renewed. If the severe courses of mercury were less in fashion, we might have more cases of this comparatively happy termination, but these, repeated in so severe and irregular a manner, do away with all hopes of this nature; they are often persisted in, though the ulceration be extending, while the body is under the mercurial influence. The repeated fatal terminations while under this mode of treatment are awful lessons, that are thrown away on most practitioners. So far from convincing them of their error, it is commonly answered, that from not beginning the use of mercury at a sufficiently early period, the disorder had been allowed to get too far before their exertions could be of use.

The number and the rapid succession, in which I have seen some patients undergo these mercurial courses, has often astonished me,

and I would not gain credit if I related what has been told me by some old practitioners of this island. I trust sincerely, that after the recent and severe blow which has been given in Europe to the specific virtues of this mineral, our practice in the constitutional disorders of negroes will lose that empirical character which it now possesses, and hereafter be established on principles deduced from a knowledge of the progress of the morbid affection in the human body.

A practice founded on these will ever be exempt from the daily revolutions introduced by fashion and prejudice. In those instances, where the bones of the palate are not the seat of disease, other parts of the body are attacked; ulcers of the most obstinate nature appear; when one dries, another breaks out, and so they proceed for many years, the patient's body having hardly a spot free from marks of constitutional ravages. If the complaint has been long settled in one leg in the form of ulceration, and that be amputated, death generally follows at no distant period. Caution, therefore, is requisite in inquiring into the previous habit of body and diseases of the subject, whose limb is to be removed.

In many cases the bones become distorted and swelled, and the seat of dreadful pain; those of the leg will be bent in the most singular way, and persons, previously well formed, become quite crooked, as is the case with ricketty children in temperate latitudes. If the subject so disposed to diseased action in the bones chance to get yaws, that morbid poison never fails to aggravate every symptom, and rouse the hereditary disposition to its fullest action: Seldom does the person survive these combined misfortunes, or, if he does, he presents a body distorted into the most fantastic shapes: These are called the effects of yaws, and are adduced by many as proofs of the dreadful ravages which that disease is capable of producing. I suspect we should be more correct if we said that such severe effects have resulted in constitutions where the yaws happened to be combined with a strong disposition to activity, in consequence of an inherited disposition.

I do not mean to deny that yaws will not excite severe and permanent derangement in the system: This is too well established by numerous, miserable examples; but at the same time it must be admitted that, where the disease comes into action, combined with a strong hereditary tendency to leprosy, the latter will in consequence be roused in a more severe manner than if it had not been combined with yaws, and will leave more marks of permanent diseased action.

Hereditary and original leprosy occasionally attacks the toes and fingers; ulceration commences with spots over the body, joint after joint drops off, and if not of an aggravated form it will stop here, and leave the patient in good health. This is called *coco-bay* or joint-evil, and is not near so frequent as formerly. Some boast of curing it by arsenic and blue vitriol, and should its progress happen to cease naturally while using these remedies, a thing not uncommon, the merit is awarded as usual to their exertions. It is said to be infectious, but as to this I cannot speak.

As such patients frequently get large families, it might be suspected that they would also inherit the complaint, but it is not the case. Some of the children born of such parents remain healthy through life; others are early attacked with bone-ache, or ulceration of the throat; few with the joint-evil, as it affected their parents. *The big foot* is very often observed to attack the offspring of such parents after the age of puberty. I never heard of one who had got the elephantiasis before that period, which is somewhat singular, and not easily explained.

These observations contain a description of the modified forms, in which leprosy now shews itself among the descendants of the African race in this island. It is to be hoped that in a short time they will entirely disappear, as they remove from the original cause of infection, and avoid whatever seems to bring the latent tendency into action. Popular opinion I know, however, is greatly at variance with the statement now made. Our endeavours are always well bestowed in attempting to remove such differences, but particularly so on the present occasion, where it is not a matter of mere opinion, but involves, by the practice which follows it, the lives of thousands of our fellow-creatures. Let us therefore briefly see whether the constitutional symptoms of the venereal disease have ever assumed such an hereditary destructive character, or whether ill-cured yaws entail such permanent misery on distant generations; for to these two sources most persons are in the habit of referring all the symptoms already described as those of modified leprosy.

All writers of authenticity, who have treated of the diseases of Africa, mention that the venereal disease in a severe form is nowhere to be found amongst the natives, and when it does appear it is to be referred to infection communicated by Europeans.

Dr. Winterbottom, whose work excels all others, says that gonorrhœa is the only form in which he has seen it, and chiefly

among those who live near the trading places. Constitutional symptoms never came under his observation during his long residence in Africa. I have inquired of many who have long practised in this island as to the occurrence of chancres and buboes with symptomatic ulceration, and find that their appearance is extremely rare in the negro race, and that when the importation of slaves was permitted, seldom was there any other form of it seen than that of gonorrhœa. I can add my own experience in testimony of this, which, though trifling when compared with that of others, goes to prove the above observation in every respect. I cannot call to my recollection a single instance of real chancre or secondary ulceration, which exhibited the true venereal character.

No professional reader, therefore, and none but the most prejudiced of those of a popular description; will refer these severe symptoms to so trifling a cause. If constitutional appearances follow the use of mercury when leprosy cannot be suspected, we may attribute the symptoms to the action of the mineral itself, which every medical man knows occasionally excites the most extensive derangement of the osseous system. The children born of diseased parents remain fine healthy subjects till the age of puberty, or near it, when the fatal disorder first appears, a thing quite unknown with regard to the venereal disease, when the infant is attacked shortly after birth with severe affections, the unquestionable result of the parent's imprudence, or exhibits some shocking deformity, which is referable to a similar origin. Some negro children, born of diseased parents, never show any symptom of a morbid nature as long as they live, while their brothers and sisters are miserable victims of its ravages.

Young persons will suffer severely, while no disease has been manifest in either parent: In such cases it can be readily traced to a generation farther back. From the most unquestionable authority it has been proved that the complaint will be dormant for a whole generation, and then break out with fresh vigour: This is very different from the laws which the syphilitic poison follows.

Children by the same parents will be affected during the course of their lives with very different forms of disease, some having it in one way, and some in another; and others escaping it altogether.

The ulceration, in its progress and character, has no resemblance to the venereal; the edges are not elevated nor contorted; there is no deep loss of substance, and it frequently stops of its own accord,

and assumes a very altered appearance, a circumstance unknown in the other disease.

The severe form of *lues venerea* is unknown to the inhabitants of these regions, and the efforts of the system are capable of overcoming it without the aid of mercury. The symptoms I have enumerated, so far from being capable of being cured by mercury, are generally aggravated by its administration.

This reasoning will I trust serve to convince most of the dangerous practical consequences that result from referring every untoward constitutional symptom to venereal origin. Throughout they have no analogy, and could only have been mistaken by those who superficially transfer their prejudices to others in affliction.

The yaws is the second source from whence such numerous maladies are conceived to originate. There is much more reason to accuse this than the venereal disease; yet still the application is too indiscriminate. When yaws have infected a weakly, diseased habit of body, it is seldom that the subject ever recovers completely; the eruption either recedes too rapidly, or some constitutional symptoms break out, such as bone-ache, pains, swellings, ulcers, sore-throat, or contracted and distorted joints, rendering the object an invalid for life: These are commonly termed the effects of ill-cured yaws, and are too generally to be met with.

I shall not in this place further dispute the point whether in reality these are relics of yaws, or merely symptoms called into action by the existence of a morbid poison in the body of a diseased subject. When such painful derangements are present, we may allow the trial of a mild alterative course of mercury, with other remedies combined, provided it has not been previously exhibited.

Dr. Home, a gentleman of great experience, and who has made many excellent observations on the diseases of this island, has remarked that when he first came to Jamaica, it was the universal practice, as soon as the yaws appeared, to give twenty-five drops of a solution of two drachms of corrosive sublimate in eight ounces of strong rum in the morning; the eruptions soon disappeared, but the greater number of those afflicted with it had gnawing pains or ulcers on their body, or the disease returned: "When this was the case, the second eruption was longer of coming to a height, and required more mercury to clear the skin: They would even relapse a third and fourth time. I have succeeded with a few of such ulcerated patients by means of salivation, lime-water, and the use of the coun-

try woods. I have left many worse than when I found them; nor can I pretend to better success with those who have complained of pains in their bones, which have generally ended in nodes, exostoses, and caries." This is a candid confession from a most excellent authority, and shows clearly the danger of exhibiting mercury at an early period of yaws. I trust I have sufficiently insisted on this while speaking of that disorder, and proved that as a morbid poison, like all others capable of being overcome by the efforts of the constitution, it will, in spite of our pernicious interference, have its regular course sooner or later.

The practice I understand is still adhered to by many who wish to establish a character of a popular nature, at the sacrifice of the health and lives of their fellow-creatures. How they can reconcile it to their consciences I cannot say, except an utter ignorance of the course it pursues be any extenuation of their fatal plan of treatment.

I have already adduced the authority of Dr. Hillary and others, who lived at a period when mercury was a universal favourite, to show that, in any preparation, it aggravates leprous affections.—Those dreadful symptoms, observable in patients who have had this mineral given to them at an early period, are not the effects of yaws so much as of the constitutional disposition called into immediate action by its imprudent use.

The conclusion I therefore come to is this, that when the yaws have gone through the different stages, the relics, as they are called, are to be referred to the morbid poison having acted on a diseased body; and, secondly, that where mercury has been early and improperly used, and followed by permanent constitutional affections, it is to be blamed either from its own pernicious action on the system, or from having given activity to an hereditary leprous tendency.

I feel little anxiety at the idea of this reasoning being termed hypothetical, provided it convince those who are in the habit of indiscriminately using it with such patients. Many have now got such an opinion of the effects of salivation, that if we do not give them mercury, they procure it from those who are too apt and ready to take advantage of their inclination: They use it secretly, and persevere in their ordinary occupations while under its active influence, until they are past all remedy.

Having spoken thus much of the nature of these affections, it will be expected that I should treat largely of the means of relief,

On this I am sorry to say I must be very brief, and for the best reason, for in truth I do not know what to recommend with any prospect of certain success. There are many things celebrated as specifics which in reality have no virtues, and numerous histories of surprising cures, where nature ought to have had the merit. Such affections are too often incurable, and if we can prevent them from proceeding further we may be perfectly satisfied.

When the throat and palate are attacked, it is seldom that we can immediately prevent their ravages, as the ulceration will extend: Fumigations, with cinnabar and myrrh, astringent gargles, generous diet, with fresh food, bark, wine, &c. will be advisable. Should no mercury have been previously given, and the patient be recently recovered from yaws, a mild alterative course may be tried. The alterative tincture of that name is the best adapted for this purpose. The greatest care is necessary during its use to avoid cold. The diet must be regulated, and of the most stimulating kind. Should no relief speedily attend this practice, we must not push it too far. There lies the error of most persons, who think that too much mercury cannot be given, and consequently sink the vital powers of the patient beyond redemption. Poultices of turpentine are of service when the ulceration is external; they are to be frequently changed, and increased in strength.

Extensive ulceration is the form which proves most troublesome. Mercury will for a time seem to alter the appearance of these in a favourable manner, but they quickly relapse into as inveterate a state as before. Regular diet, in which very little salt provision is introduced, and warm comfortable clothing, are all that promise any assistance.

There is a vegetable preparation of this island, which was discovered by an old negro woman many years ago at Montego-Bay, and which I have used frequently in cases of bone-ache, ulcers, and what are termed relics of yaws, with great success: What the preparation is made of I cannot say. It appears to be powdered vegetable substances, without any mineral. I have procured it from Mr. Watt, a druggist in Kingston, who has obtained the secret by purchase, and sells it in small bottles, at ten shillings each, with regular printed directions as to the manner in which it should be administered. — From what I have seen of its effects, I would advise a trial in obstinate cases of these common complaints. Antimonial preparations have been thought highly serviceable in such cases,

and at a former period were freely used. Their mild operation can induce no serious symptoms, and therefore a fair trial is to be afforded them, though I doubt greatly of their efficacy in effecting a radical cure in any instance. From the use of a generous, fresh diet, combined with a decoction, made from the woods in general estimation, I have seen serious symptoms give way, and the progress of the complaint arrested for a long time. If we can accomplish this, we shall have performed a great deal, and should rest contented, for, by persisting in more active remedies, we may induce a return of the previous diseased action, which will speedily prove fatal. A strict abstinence from all irregularities, and kind treatment, will greatly assist our endeavours on every occasion.

SOME OBSERVATIONS AND EXPERIMENTS

ON

The Medicinal Plants of Jamaica.

The following account of the virtues of the medicinal plants of this island I acknowledge to be very imperfect, compared to what I sincerely trust it will be in a few years after this; but the materials being in so unconnected a state at present, little advantage can be derived from them. Their healing powers rest in many instances on the assertion of an individual, or from their singular effects in some solitary case, which has been copied by every author, without any attempt to renew the experiment. The most opposite qualities are ascribed to the same plant, and numerous histories are related of cures effected by the exhibition of substances, which we know to possess no active properties whatsoever. In this situation we find things when we open the valuable volumes of Sloane, Barham, Hughes, Browne, Robertson, and many others. They have collected many interesting facts, which convince us that they have been treading on a surface, beneath which were concealed valuable materials; but by opening it in too many places at one time, and abandoning the search on the occurrence of the slightest obstacle, they have left the treasures undiscovered. We cannot generalize the result of their labours, nor take advantage of their insulated facts. They have had no principles to guide them in their investigations, and until such are adopted no benefit can follow the most anxious inquiries.

Thus the labours of ingenious men fall to the ground for the want of a correct mode of proceeding. They tell you of a case that was cured by such an application, and of the speedy relief that attended the use of some particular plant, but the sensible qualities of these are left undefined, and their operation on the healthy system altogether omitted.

No part of the science of medicine is so low in its progress as that of the *Materia Medica*, nor any where have we so often to retrace our steps, in consequence of our having advanced with too great

rapidity. We know at present in reality but little of the real nature of the virtues of medicinal substances; we can talk about them freely, but our words are expressions for the most vague ideas and imaginary qualities. That melancholy and progressive revolution, which pervades the moral as well as the physical world, exerts its baneful influence in this department, which, of all others, might have claimed exemption. Fashion here creates imaginary powers, and bestows the name of specifics on substances which the next age treats with merited contempt. So it has been since the world commenced, and our successors will have too much reason to say that our period of time was as remarkable for this folly as any which preceded it. A radical reform is therefore necessary. From our natural indolence we receive without examination what has been transmitted from age to age; and so great is our reverence for the authority of celebrated names, that we admit as ascertained facts what should have been subjected to the test of the severest experiments.

Some years ago, while at the University of Edinburgh, and eager in the pursuit of medical studies, a few of us associated for the purpose of making experiments on various medicines, the active properties of which we had reason to question: To each were assigned so many, and the mode in which they were to be tried on the healthy body; the state of the pulse, feelings, and every other circumstance were minutely recorded by the individual who was using the medicine. When deemed of sufficient importance, the same substance was taken by different persons at the same time, and the result carefully compared. Great part of these were briefly communicated some years ago to the public by my learned friend Dr. Knox, in the Edinburgh Medical Journal, and I believe had not a little influence in altering the opinions of some medical men as to their belief in certain remedies.*

Our different views in life leading us to distant parts of the world; we separated early in the course of our inquiries, and I have never learnt whether these gentlemen have prosecuted their researches. With regard to myself I must acknowledge the little success and satisfaction that have hitherto attended any of my exertions. I

* From a series of experiments continued for many months, and by various persons, it was found that the pulse was from four to six beats fewer in the evening than in the morning. This will be found to be general, and is much at variance with the old hypothetical doctrine of an evening febrile exacerbation.

have seen excellent opportunities pass by me without being able, from want of proper subjects, to derive the necessary advantage from them, a thing of all others the most galling to an anxious mind; and on many occasions the sources of fallacy were so numerous, that I have been under the necessity of rejecting the results altogether.

The plan, however, on which our experiments were conducted, is what I would desire to impress on the minds of those who may wish to benefit the medical profession by similar researches in future. The great object in my opinion is to ascertain by repeated experiments the effects of the substance, whose virtues we inquire into, on the healthy body: The alteration of every function is to be carefully noted down. We may then infer that, generally speaking, the same results will follow in a morbid state, and combat successfully certain symptoms which we wish to obviate. We are not always, however, to expect the same effects from the same substance in disease as in health: Occasionally they are entirely opposite; but such a circumstance is unavoidable in the delicate actions of the vital powers, and is the cause of the profession of medicine being styled an uncertain one. We may, however, lay it down as a general rule, that our experience will be less liable to error, and our practice more successful, when they are derived from observations made on the actions of remedies on the healthy body, than when a morbid state has guided our opinion as to the means of relief; and on this principle all future inquiries ought to be conducted.

ALOES (SEMPER VIVUM).

This is a safe and valuable purgative, particularly for children: With the negroes it is a sovereign remedy for every complaint, and they have every reason to place great confidence in its virtues: It is astonishing that it is not more frequently trusted to in their disorders by the generality of practitioners, instead of employing those feeble adulterated preparations that are sent us from Europe. Why should we disregard the powerful assistance to be derived from its frequent administration? If a few plants were regularly cultivated on every estate, it might always be ready at any season of the year. The most dry, barren soils are favourable to its growth, and it will stand cutting for many years. The expressed juice, slightly evaporated, and covered with an inch or two of spi-

rits, I have found to keep for six months, without losing any of its virtues. In worm cases I have particularly mentioned the advantages to be derived from its use. Instead of a small spoonful of the juice I have often given an ounce, triturated with an egg, to a child of ten years of age; a full, copious evacuation never failed to follow. Mixed with sweet or castor oil and turpentine, it is quick in its operation. I seldom order any other medicine as a purge for children suspected of worms. Its action is peculiarly strong on the rectum, where these vermin are chiefly lodged. When given to females and adults the dose may be greatly augmented. Spirits dissolve nearly all the active parts, and this proves a convenient form, which is easily prepared, and keeps well, the great object with all medicines in a warm climate. I cannot, therefore, too strongly recommend to those who have the charge of negroes to endeavour to promote the cultivation of this plant for medicinal purposes: They can seldom err in giving it in small doses to children, there being no dread of its operating violently, and I refer them to the previous part of this treatise, where the cases in which it should be used are particularly pointed out.

ADRUE.

This remedy was, soon after my arrival, pointed out to me by a sensible negro, who had the charge of the hospital on a large estate. I was called to see a white patient who had been well evacuated, but was seized with that dreadfully obstinate vomiting, which proves so distressing in the fevers of all warm climates. I tried elixir of vitriol, effervescing draughts, and other remedies, reckoned useful in such cases, but with little or no effect. From the situation and robust habit of the individual I was afraid to advise opium, and really, as I believe is the case with most medical men, did not know what to do, when this negro recommended me to try a strong decoction of this root as a last resource; a handful of the root sliced, and boiled down to one third, was made use of; he took a wine-glassful every half hour with some camphorated julep; the vomiting ceased in an hour's time, and never returned. Since that time I have made very frequent use of it, and never without the greatest benefit. I have combined it chiefly with the wild cinnamon. In chronic diarrhœa, or the obstinate remnants of previous dysentery, it is singularly efficacious in removing the irritable symptoms.

BALSAM CAPIVI.

I look on this drug to be possessed of the most trifling virtues, and even doubt much if it has any, being one of the few remedies, the celebrated powers of which have descended from generation to generation, without any attempt to inquire experimentally as to its real effects on the human body. How it should operate in curing obstinate gleets I am at a loss to conceive. A tea-spoonful is generally ordered twice daily in cold water, and that continued for a length of time. I have given, by way of experiment, more than half an ounce daily for three weeks to patients labouring under gonorrhœa in a chronic state, and, after watching minutely every effect, I could never discover any change of importance. It would be of little consequence if it were merely ascertained that it did not possess any active properties. On the contrary, I am firmly persuaded that many celebrated medicines of the present day, which are constantly prescribed in certain disorders, operate only by their being quite inefficacious, and allowing the salutary actions of the system to exert their influence; but the patient's health is trifled with. In cases of obstinate gonorrhœa, most likely proceeding from strictures, delay is of all things the most dangerous: Unless we early and effectually attack the local state of parts, no remedy in the catalogue of the *Materia Medica* will be of any service.

Another common, yet shameful, fact is, that if it were a powerful medicine no reliance could be placed on the substance sent out from England as such. I have procured that species of balsam that flows from the great Indian fig-tree, and tried its effects in several instances, but I cannot say with any success.

BALSAM OF TOLU.

This should be much more frequently employed in cases of severe cough, with pulmonary affections, than it generally is at present: It is a powerful pectoral, and ought to supersede the gum ammoniac on all occasions, and especially the vinegar of squills, and other preparations of that root, which can never be relied on as effective in warm climates. When genuine it has a most delightful, fragrant smell, and tenacious consistence: It is brought to us direct from the Indian Coast in small jars, and at other times in round calabashes, and can be purchased at a very cheap rate in a genuine state, before it has undergone the improvements of the apothecaries'

honourable *suggestions*. Mixed with honey and syrup, as ordered in the forms of medicines, I have ever trusted to it entirely in the pulmonary affections of negroes, when of a catarrhal description, without fever. If brittle, it has been adulterated, and is to be rejected.

BARK.

Several years ago Dr. Wright sent me specimens of the various species of the Cinchona he had discovered in this island, and three unpublished drawings of the trees, together with many interesting remarks on the effects produced on the human body. I must confess that I have not paid that attention to the subject which its importance demanded, or that he requested from me, constant professional duties having in a great measure prevented me. Some years ago I procured from an intelligent gentleman, who traded to the Spanish Main, specimens of various kinds of bark much used by the natives in their fevers, with drawings of the trees from which they had been obtained. From the want of proper opportunities in this island, I sent them to Dr. Wright, in Scotland, that they might have a fair trial made of their virtues. Some time before his death he wrote me, that, from what he understood, they had been attended with great success, the particulars of which he promised shortly to communicate: As this was never executed, if these few pages should ever meet the eye of any one entrusted with his papers, a detail of any thing connected with these experiments would prove very acceptable.

The high price of bark, and the shameful adulteration practised on it by the various and upright tribes of wholesale and retail merchants, induced me at an early period to seek for substitutes produced in this island, which might be procured in a state of purity. The result of these inquiries was published in a late number of the Edinburgh Medical Journal, to which the professional reader is referred. Since that period I have had further occasion to confirm my opinions, therein stated, by satisfactory additional experiments; and, if health and greater experience are afforded me, I shall be able shortly to produce a body of evidence that will greatly affect the present boasted claims of the specific powers of the Peruvian bark. I have examined many of the parcels sent out to this island, and have been astonished at the extent to which the fabrication has been carried, consisting chiefly of some inert powder that resem-

bled the genuine bark. We need not therefore be surprised at the daily complaints which reach our ears regarding the inefficacy of this substance in stopping the attacks of fever. When first introduced into practice a few drachms were considered sufficient to check the most obstinate intermittent, but now it may be given in ounces, and pounds *thrown in*, as it is elegantly termed, and, after swallowing an immense quantity of what proves to most stomachs exceedingly nauseous, the poor patient may think himself well off if he gets rid of his fever with impaired digestion. As a tonic, strengthening and nourishing remedy, it is universally given in every case of debility, let it proceed from what it may, without regard to the complaint or situation of the individual. The day will come, and probably is not far off, when our successors will justly ridicule the superstitious reverence in which the virtues of this drug have been held.

The substitute, which I have used most extensively in fevers and deranged action of the stomach and bowels, is the *quassia* or bitter-wood. I have repeatedly given it in powder by itself, and combined with bark in the intermittent of white people, and never found that the least unpleasant symptom resulted; on the contrary, the patients expressed themselves highly satisfied, and got rid of their fever in a short time. In cases of debility, after severe illness, I have always preferred the use of it to bark, especially with negroes, combined with various other substances. I have made several other trials with the bark of the lilac or hoop tree and the neeseberry bullet-tree, and have good reason to think they would prove serviceable. Fevers, however, of an original type, are so rare with negroes, that my opportunities of observation have been very few. I have succeeded in stopping intermittents by means of preparations made from unroasted coffee, which I have detailed at length in the publication alluded to:

WILD CINNAMON.

This should be kept on every estate. The negroes are excessively fond of it, and place the greatest reliance on its virtues: The berries are to be preferred when they can be had. In cholic pains, to which they are so liable, it is a sovereign remedy, mixed with bird-peppers, and made into pills; in dysentery, when the action of the intestines has become languid, it is a good stomachic; a strong tincture can be made with spirits, which we may combine

with other substances, such as the cocoon antidote, the contrayer-va, and the various peppers of the country: These things ought to be prepared and kept in readiness on every property, and given to such as complain of their stomach and belly *hurting* them, and who prove on every occasion a numerous and troublesome set of people to the planter. Most persons at present adopt a plan of giving these people neutral salts, and on some places they have got into such a habit of this, that nothing else will satisfy them: They term it washing their belly, and, when any great feast is going forward, it is a common practice amongst them to take a tremendous dose before the appointed day, with the view of removing all obstructions to the enjoyment of it. The substances I have mentioned are much to be preferred, and we can quicken their operation by the addition of any purgative.

CAPSICUM PEPPERS.

The various species of this plant afford an excellent remedy for many of the disorders incident to the negro race, and deserve to be extensively cultivated.

I have made several experiments with them on my own person. Twenty grains, made into pills, and taken within the space of half an hour, have raised the pulse fifteen and even twenty beats, and kept it so for three or four hours: The sensations were those of slight intoxication, a remarkable fulness in the head, and throbbing in the arteries, which were followed by a profuse perspiration and remission of the previous symptoms. I never found it to affect the urinary, nor leave debility in the digestive, organs. I have repeated the exhibition of this substance in much larger doses to negroes and the brute creation, and have found the same effects to follow.

Combined with equal parts of the wild cinnamon, or concrete salts of hartshorn and camphor, it proves a delightful stimulant in nervous debility and irritation. The indiscriminate use of wine and spirits in cases of great debility, and the faith we repose in their exhilarating qualities on the stomach and intestines, prevent our substituting what would much more efficaciously remove the most alarming symptoms, and do away with that dangerous nervous irritation that constantly follows the administration of spirituous liquors, more particularly in a diseased habit of body. In the low state, from the long continuance of the nervous fever already men-

tioned, I have been obliged from mere necessity to have recourse to these remedies, when wine could not be procured, and I now feel so convinced of the efficacy of their action on the debilitated system, that I never hesitate a moment to administer them in preference to any other remedy. They also quiet the irritable state of the stomach, so obstinate in the fevers of tropical climates, and induce a pleasant, critical perspiration, which gives relief to every unpleasant symptom. If the powder made into pills cannot be swallowed, the tincture, as mentioned in the forms of medicines, can be substituted. The diluted juice of the capsicum is a sovereign remedy in diseases of the eye, attended with a relaxation of the coats.

CABBAGE-BARK.

Many entertain a very strong prejudice against this remedy, as well as the bastard ipecacuanha or red head, from reported instances where they have operated with severity, and even produced fatal effects.

My own experience of their utility, compared with that of others, has been but partial. I have, however, the testimony of those who have had forty years' experience in the practice, to prove that, when properly administered, in the way I have already mentioned, they seldom or ever saw any injurious consequences, and no greater degree of harshness or violence in their action than what attends all cathartic medicines. The only caution, necessary to be given as to the cabbage-bark, is to have it well dried before we make use of it: From not attending to this, it has fallen greatly into disrepute, and is considered by some as a dangerous substance. There is a prevalent but erroneous idea, that there are two kinds of cabbage-bark, red and white, and that the latter is poisonous: The difference which certainly does exist arises merely from the local situation of the tree: This is well known to carpenters and others, who are in the habit of using the timber, which proves durable, takes a fine polish, and is much in request. As to the great powers that have been attributed to it in expelling worms, I doubt much their existence any further than what belongs to all purgatives. Combined with the inspissated juice of the various species of the convolvulus, the operation is speedier and more effectual.

The bastard ipecacuanha or red head does certainly at times operate violently, but so do all emetics. I have often tried the

pork weed, an ounce of the dried root, infused in a pint of wine; three spoonfuls are a sufficient dose: When properly prepared I never saw any bad consequences from it. The seeds of the gamboge thistle I have already spoken of when on the subject of worms.

COFFEE.

From the suggestion of a foreign medical journal I was induced to try the effects of this substance in intermittent fevers, having naturally myself a great aversion to bark. I first ascertained its effects on the body in health. An ounce of dried unroasted coffee was infused in a pound of water, and boiled down to four ounces: One ounce was taken every quarter of an hour; at the end of the hour the pulse had increased six beats, and continued so for some time. Experiments were afterwards repeated on the extract, decoction, and powder, with various results. The sensation which was felt after these trials was that of fulness, and of rather a pleasant nature, which continued occasionally for an hour or so. Satisfied with these results, I waited for an opportunity of putting them into execution on some diseased subject, who I little imagined would prove to be myself. I was seized, in consequence of exposure to an unhealthy atmosphere, with a regular tertian intermittent fever. I took a purgative, and allowed the disease to go on for fourteen days, without any further medicine; for the very smell of bark excited instant vomiting. I then tried the decoction of coffee: An ounce, three times daily, prepared as above: By the next time the paroxysm was expected I had taken six ounces of the powdered coffee, made into decoction: The fit came on as usual, but was quite trifling. I continued the medicine for a week longer, and the fever never returned. I enjoyed good health for six months, when, from my professional duties leading me to be exposed at an unseasonable time, I got my old companion back again. I immediately took the coffee decoction, and had only three attacks of the disease.

A young gentleman, lately come to the island, was attacked with intermittent fever, which he imprudently allowed to go on for six weeks. He applied to me. I gave him the coffee decoction, prepared by myself, but so disguised that he could not detect it. After regularly using it for six days the fever left him, and never returned to my knowledge.

A negro woman had been subject to an intermittent fever for six months, which she attributed to the situation of her house being

extremely low and swampy. She had used bark and snake-root without being able to get rid of it. The extract of the coffee, along with a scruple of the powder, was given for ten days. The fever ceased to trouble her, and the remedy was continued for some time afterwards. I could mention several other cases that have been successfully treated in this manner by coffee, which seems to prove, that by itself, or in conjunction with other substances, it may prove serviceable in intermittent fevers: I have not been able to determine the doses accurately.

CONVOLVULUS, OR BIND-WEEDS.

From this extensive tribe of plants a strong drastic purgative can be procured. Four years ago I sent home various specimens of the inspissated juices, some of which were given me, and others I prepared myself. They were found by the gentleman to whom I sent them to be of a very active nature, and acted violently, until, from repeated trials, he learnt how to regulate the dose, and moderate the effects, by combining other substances.

From the sea-side potatoe-slip I have prepared an extract bearing every appearance of scammony. In doses of twenty grains, with aloes, I have found it quick and safe in exciting the action of the intestines, and it might prove of service if cultivated.

From the Indian creeper and Spanish arbour-vine I have procured, by evaporation, an inspissated juice, which has answered all the purposes of the stronger purges. Instead of giving large doses at once, seven or eight grains are to be repeated every two hours till complete operation is obtained.

CHINA-ROOT AND SARSAPARILLA.

It is somewhat surprising that medical men and others trust urgent cases to the uncertain qualities of this simple mucilaginous plant. How it has kept its ground so long I am at a loss to discover. Its innocent demulcent properties are the most that can be said in its favour. Gallons are drunk with the view of removing inveterate cases of conceived lues venerea, bone-ache, ill-cured yaws, and other constitutional symptoms. The regulated diet and care the patient takes of himself while using it are the causes of the apparent success attending it. Nothing in reality can be expected from so trifling a remedy.

DUMB-CANE.

I have made numerous experiments on the virtues of this plant, and obtained some singular and unexpected results, but, being confined entirely to the brute creation, I see no necessity for mentioning them at present. Internally to the human subject, I have never ventured on it. An ointment, made with hogs' lard and the expressed juice, is very useful as a stimulant application, and as a cataplasm in cases of debility; it irritates, but does not blister, the skin. At times I have observed that it has much more acrid qualities than at others, particularly after rainy weather.

HOG-GUM.

This should be kept on every property, being a favourite with negroes, and of service to them in their obstinate rheumatic disorders. It forms an excellent substitute for Burgundy pitch, which is always adulterated. Spread on leather, and applied to contracted and pained limbs, it proves of benefit, by exciting a gentle stimulus in the weakened part. In lumbago it is good.

ZANTHOXYLUM, OR PRICKLY YELLOW WOOD.

From the valuable communication of Mr. Felsted on this subject, I was induced to repeat several experiments on its effects when taken internally. I procured the juice from the tender roots in a fresh state. A tea-spoonful was swallowed every half hour. Three were taken when I found it to operate powerfully.

From the first dose in ten minutes the pulse had increased six beats; from the second and third it rose to fifteen, and continued so as long as I made any observations. I found for the first half hour an unusual sensation in the throat and stomach, by no means pleasant; this increased, and was followed by a strong desire to vomit, with a sense of oppression; drowsiness came on, and a remarkable sense of distension in the head, with slight giddiness and imperfect vision. Being near evening I laid down, and quickly fell asleep; but it was greatly disturbed by dreams, and sudden startings, such as I uniformly experience after taking opium. The bowels were moved in the same manner as if I had taken a purgative. All the next day I felt uneasy, drowsy, and nervous, which gradually wore away. I afterwards took fifteen grains of the powdered root, and repeated the dose three times within the hour.

Effects, nearly similar to those in the previous experiment, followed, but in a much milder degree, unattended with any desire to vomit. I gave a negro three large spoonfuls, one every twenty minutes, of the expressed juice; the pulse was evidently increased, but I could not observe any other symptom, as he fell asleep in a short time. He said that his bowels were not moved. A negro woman, who was troubled with regular returns of the dry belly-ache (a disease extremely rare with them), took four spoonfuls, one every fifteen minutes, and a dose of oil after the first; next day she expressed great relief, much more so than on any previous occasion. I informed her of the remedy, and she tells me that whenever her complaint returns, with any degree of severity, she never fails to experience the most immediate ease from her cruel disorder. In the colicky pains, so troublesome to negroes, I have several times used it with the most speedy and marked effects. The doses given to them must be much larger than to white persons.

The roots are covered with a light, soft, powdery substance, of a yellow colour, and an agreeable scent. After digging away the earth that surrounds them, they are to be cut and washed. The farinaceous covering is to be carefully scraped off, and dried by exposure to the sun. If put into well-stopped bottles, it will keep for some time. The dose is various. I have uniformly given fifteen grains every twenty minutes, made into a bolus: Three of these generally were sufficient. Three tea-spoonfuls of the expressed juice of the fresh roots: This may be preserved in rum, along with syrup. A decoction may also be made.

Its effects in cleansing the foulest sloughy ulcers have been long known, and it is greatly used by the negroes for that purpose, combined with other country remedies, particularly the bitter cassada, scraped and made into powder: Powdered bark and myrrh can be added, as the case may require,

Weights.

Half a scruple	<i>contains</i>	ten grains.
One scruple	.....	twenty grains.
Half a drachm	.....	thirty grains.
One drachm	.....	sixty grains.
Four drachms	.....	half an ounce.
Eight drachms	.....	one ounce.

Measures.

The pound or pint	<i>contains</i>	sixteen ounces.
The gill	.....	four ounces.
The ounce	.....	eight drachms.
The drachm	.....	one hundred and sixty drops.

By a table-spoonful is meant half an ounce.

By a glass or cup full three ounces.

By a tea-spoonful about one hundred and twenty drops.

Every impression on the thin weights stands for a grain.

Doses of Medicines for Adults.

To children of one year old, one-sixth of what is mentioned; to those of three years, one-fourth; of seven years, one half; of fifteen years of age, two-thirds.

- Aloes—five grains to one scruple.
- Antimonial powder—six to twelve grains.
- wine—sixty drops.
- Asafoetida—ten grains to half a drachm.
- Balsam of capivi—one tea-spoonful.
- Bark—fifteen grains to one drachm.
- Calomel—four to eight grains.
- Camphor—four to twelve grains.
- Capsicum pepper—fifteen grains.
- Cinnamon—one tea-spoonful.
- Elixir, vitriol of—twenty drops.
- , sacred—two drachms to half an ounce.
- , paregoric of—thirty to sixty drops.
- Cantharides, tincture of—fifteen to sixty drops.
- Gamboge—three to twelve grains.
- Ipecacuanha—ten to fifteen grains, as a vomit.
- Laudanum—fifteen to eighty drops.
- Magnesia—half a drachm to one drachm.
- Mustard, as a vomit.
- Myrrh—ten grains in powder.
- Nitric acid—two drachms to one quart of water, to be measured in a wine-glass.
- Nitre—ten to fifteen grains.
- Oil of peppermint—ten to fifteen drops.
- Opium, in pill—one to three grains.
- Squills—a tea-spoonful.
- Pills, mercurial—ten to fifteen grains.
- Powder, Dover's—ten to twenty grains.
- , James's—five to twelve grains.
- Rust, iron of—ten grains to half a drachm.
- Rhubarb—ten grains to half a drachm.
- Salts, Glauber's—half an ounce to one ounce.
- , Epsom—three tea-spoonfuls, dissolved in cold water

Salt of tartar—five to twenty grains.

— of steel—three to ten grains.

Sulphur—half a drachm to one drachm.

Spirits of hartshorn—two tea-spoonfuls.

— of lavender, the same.

Sweet spirits of nitre, the same.

Spirits of Mindererus—two table-spoonfuls.

Squills, vinegar of—sixty drops.

Tartar emetic—two to three grains.

—, soluble—half an ounce.

Tincture of bark—two tea-spoonfuls.

— steel—twenty drops.

Vitriol, white—ten to fifteen grains, as a vomit.

—, blue—one grain and an half, as a vomit, in water.

Forms of Medicines.

LAUDANUM.

SLICED opium, 10 drachms; rum, proof 22, one pint: Digest for three days in the hot sun-shine, and strain. I would always recommend having laudanum procured from home, as the strength is much more accurate and regular than what we can prepare, and the cases in which it is generally required are of an urgent nature.

VINOUS TINCTURE OF OPIUM.

Extract of opium, one ounce; bruised cinnamon, a drachm; white wine, a pint: Macerate for eight days, and strain.

AQUEOUS SOLUTION OF OPIUM.

Opium, six grains; water, three ounces: Rub them together in a glass mortar for ten minutes; strain, and add a wine-glassful of sweet spirits of nitre, if necessary: A table-spoonful a dose. This preparation will not keep, and must be made as required.

ANTIMONIAL WINE.

Tartar emetic, two scruples; boiling water, two ounces; Madeira wine, eight ounces: A tea-spoonful, so as to excite vomiting.

DOVER'S POWDERS.

Vitriolated tartar (sulphate of pot-ash), three drachms; opium and ipecacuanha, of each a scruple: Grind them to a fine powder: Dose, ten to fifteen grains.

EFFERVESCING MIXTURE.

Salt of tartar, two drachms; water, half a pint; two table-spoonfuls to one of strained lime-juice: To be taken while effervescing. If it be required to prove a laxative, a small spoonful of Epsom salts is to be added.

TARTAR EMETIC SOLUTION.

Tartar emetic, four grains; warm water, half a pint: A wine-glassful every fifteen minutes, till it operates, upwards or downwards. A table-spoonful, with a few drops of laudanum, will act as a sudorific.

PAREGORIC ELIXIR.

Flowers of benzoin, three drachms; opium, two drachms; oil of aniseed, half a drachm; proof spirits, a pint: Allow to digest for several days, and strain: An ounce of hartshorn may be added.

SACRED ELIXIR.

Sliced rhubarb, ten drachms; aloes, six drachms; dried orange-peel, an ounce; spirits, two pints: Digest for several days, and strain: Dose, a table-spoonful.

TINCTURE OF CANTHARIDES.

Bruised cantharides, one drachm; spirits, a pint: Digest for several days, and strain: Dose, 15 drops. It is preferable to have it ready prepared from Europe.

TINCTURE OF CAPSICUM.

Bird or other peppers, an ounce; spirits, a pint and a half: Macerate for ten days. Excellent in sloughy sores on the throat.

CAMPHORATED MIXTURE.

Camphor, a scruple; strong spirits, a tea-spoonful; sugar, half an ounce; water, a pint: Dissolve the camphor first in the spirits, and then add the other ingredients.

SPIRITS OF CAMPHOR.

Camphor, four ounces; spirits, two pints. We may add olive or palm oil, so as to form an excellent liniment.

LIGNUMVITÆ MIXTURE.

Of the gum, a drachm and a half; sugar, one table-spoonful; cashew-gum dissolved, three table-spoonfuls; water, half a pint: Dose, a wine-glassful—morning and evening. This is considered one of the best forms of exhibiting the gum guaiacum for chronic rheumatism.

TINCTURE OF LIGNUMVITÆ.

Of the gum, six ounces; spirits, a pint and a half: Macerate for ten days: Dose, a table-spoonful in milk or water. A tea-spoonful of spirits of hartshorn may be added.

ALTERATIVE TINCTURE.

Gum guaiac, ten drachms; snake-root, three drachms; pimento and opium, of each a drachm; spirits, a quart: Digest, add half a drachm of corrosive sublimate. Dissolved in an ounce of spirits: Dose, two table-spoonfuls in the lignumvitæ decoction.

ELECTUARY OF GUAIAECUM AND BARK.

Bark, an ounce; gum guaiac, half an ounce; rust of iron, two drachms; syrup, as much as to give consistence: Dose, a dessert-spoonful twice daily.

SPIRITS OF MINDERERUS.

Carbonate of ammonia (smelling salts), two ounces; strong distilled vinegar is to be added until all effervescence ceases: Dose, half an ounce. It is preferable to obtain this from Europe; it is a cheap medicine.

ALTERATIVE DIET DRINK.

Sarsaparilla and lignumvitæ chips, of each eight ounces; water, two gallons; boil to one; strain, add a quart of sugar, and an ounce of antimonial wine. Dose, half a pint daily.

NITRIC ACID.

Two drachms to a quart of water sweetened, and taken occasionally; it should be sucked through a quill.

STEEL BITTERS.

Salt of steel, 120 grains; the dried rind of two Seville oranges; a pint of rum, with a few shavings of bitterwood; place the whole over the fire for a few minutes: Dose, three table-spoonfuls.

CONTRAYERVA BITTERS.

Take a large handful of the roots, infuse them in a pint of wine, add

dried orange-peel, or, if put in rum, add three drachms of salt of steel to a quart: A large spoonful every morning in a pint of the bitter-wood infusion.

COCCOON ANTIDOTE.

Slice a few of the kernels; add the powdered bark of the wild cinnamon; a pint of rum. It operates likewise as a purge.

PEPPER MIXTURE.

Three spoonfuls of bruised bird-pepper; same of wild cinnamon powdered; two drachms of salt of steel; infused in a pint of rum: Dose; a table-spoonful in bitter-wood. Good in cases of dirt-eating and cachexia.

STOMACHIC POWDER.

Prepared chalk, rust of iron, and rhubarb, of each equal parts: Dose, a spoonful twice daily in syrup of ginger.

ANOTHER.

Myrrh, one drachm; salt of wormwood, half a drachm; salt of steel, 12 grains; water, six ounces; syrup of ginger. In cases of debility this may be taken during the day in three doses.

STOMACHIC PILLS.

Powdered aloes, eight drachms; salt of steel, two drachms; syrup of ginger as much as sufficient: Make into 36 pills: Two occasionally.

BILIOUS PILLS.

Gamboge, jalap, calomel, and aloes, of each 10 grains; oil of peppermint, a few drops: Form into ten pills: Three for a dose.

INJECTIONS, &c.

1. White vitriol, 20 grains; sugar of lead, 60 grains; laudanum, a tea-spoonful; add mucilage of cashew gum: Water, a pint. For gonorrhœa, &c.

2. Calomel, two drachms; lime-water, half a pint; cashew gum solution, four ounces.

3. Alum, a drachm; water, six ounces.

4. Corrosive sublimate, two grains; lime-water, six ounces: Mucilage. Very efficacious in obstinate gleet.

GARGLES.

1. Bruised bird peppers; strong vinegar, a pint; culinary salt, a spoonful. Useful in sloughy sore-throats.
2. Nitric acid, a drachm; water, a pint.
3. Sage-tea, a pint; vinegar, six ounces, boiled, with a few penguin-apples.
4. Bark, an ounce, made into decoction; elixir of vitriol and tincture of myrrh or alum, as much as to make it astringent.
5. Strong infusion of the wild cinnamon with the pepper tincture.
6. Mercurial gargle. Corrosive sublimate, four grains; dissolve in a pint of water, with mucilage; add honey.
7. Four grains of lunar caustic, dissolved in a wine-glassful of water; twenty drops of oil of vitriol in half an ounce of honey; two grains of corrosive sublimate. Any of these substances may be employed in cases of ulcerated throat; a piece of rag tied on a probe, and dipped into the mixture; the parts are to be touched several times daily, using some stimulating gargle at the same time.

LOTIONS.

1. One or two grains of corrosive sublimate to an ounce of water, with alum; Goulard's extract, two tea-spoonfuls; vinegar, four ounces; six ounces of water, with a few spoonfuls of laudanum.
2. Blue vitriol and alum, of each three ounces; elixir of vitriol, one ounce; water, three.
3. Lunar caustic, four grains; alum, three drachms; water, four ounces.
4. Ten grains of corrosive sublimate; two ounces of diluted muriatic acid; a quart of water.
5. Blue vitriol, two ounces; oil of vitriol, a drachm; a quart of water.
6. Fresh made lime, three ounces; carbonate of ammonia, two scruples; verdigrease, four grains; water, six ounces.

CLYSTERS.

1. Mucilage, a pint; salts, an ounce; castor-oil, three table-spoonfuls.
2. Soap, half an ounce; table salt, a spoonful; mucilage.
3. Powdered aloes, half an ounce, dissolved in a pint of boiling water.

List of Medicines necessary to be imported.

Aloes, socotrine.	Salt of steel.
Alum.	— of tartar.
Antimonial powder.	Spirits of Mindererus.
Bark, Peruvian.	Sugar of lead.
Calomel.	Sweet spirits of nitre.
Camphor.	Tartar emetic.
Cantharides.	Turpentine.
Corrosive sublimate.	Tincture of digitalis.
Cream of tartar.	Tincture of cantharides.
Dover's powders.	Tincture of opium (laudanum.)
Elixir of pargoric.	Tincture of steel.
Flowers of sulphur.	Verdigrease.
Gamboge.	Vitriol, blue.
Honey of squills.	—, white.
Ipecacuanha.	—, oil of.
Jalap.	Vitriolic ether.
Myrrh.	Yards of adhesive strap.
Nitre.	Syringes, male and female.
Nitric acid.	Clyster syringes for adults, and
Oil of peppermint.	children.
Opium.	Lancets.
Ointment, mercurial.	Scales and weights.
Red precipitate.	Pestle and mortar.
Rhubarb.	Surgeons' lint.
Salt of hartshorn.	Trusses.
Salts, Glauber's.	Bougies.
—, Epsom.	Phials, assorted.

Medicines, which soon lose their virtues in a warm climate, such as Bark, Blister-Flies, Rhubarb, Jalap, Fox-Glove, and Squills, should be ordered to be put into small ounce bottles, well secured. On large estates a cupping glass, made without springs, and three spare glasses, with a pump-handle, as made by Mr. Evans, of London.

List of Medicines, &c. which are produced in the Country, and ought to be kept on every estate.

Aloes, or sempervive plant.—This is easily propagated, and grows on the most rocky situations; the fresh or inspissated juice.

Bark, cabbage.—This should be well dried before it is made use of either in powder or decoction; the tincture also proves purgative.

Bark, Jamaica.—The tree is scarce in some places.

Bitterwood.—A very common tree.

Balsam of tolu.—When pure it is of the tenacity of bird-lime, with a pleasant smell; the best is contained in small round calabashes, semi-transparent.

Capsicum peppers.—Dried and in tincture; mixed with blister-flies, they assist greatly in exciting external irritation.

Cashew gum.—When pure it is nearly transparent, and brittle; abundance can be procured in the month of July.

Cinnamon, wild.—A common large forest tree; the bark and dried berries make a good tincture.

Cowitch.—When we preserve it in a dry state, it is to be packed closely in barrels.

Castor-oil.—The nuts are to be planted in gullies and sheltered situations, as they are liable to be destroyed by breezes; an emulsion of the full nuts may be substituted when the oil is not to be had.

Contrayerva.—The roots and stalks.

Cocoon antidote.—The kernel.

Cyperus (adruë).—The roots sliced and made into decoction.

Dumb-cane.—Expressed juice made into an ointment.

Ginger.—Dried root, and mixed with syrup.

Hog-gum.—The tree grows in mountainous situations.

Indian arrow-root.—The greatest quantity is to be procured, when it is dug, in the month of January.

Lignumvitæ.—Grows chiefly in a lowland situation; the gum and wood.

Liquorice, wild.—Infusion of the leaves and tops.

Logwood.—Decoction of the chips.

Lily root.—Excellent for poultices.

Prickly yellow wood.—Roots covered with a fine yellow substance, which is to be scraped off and dried; also fresh juice, which will keep for some time in rum and syrup.

Ringworm-bush.—Fresh expressed juice.

Sago.—Made in the same way as arrow-root.

Tamarinds.—The preserved fruit.

Tobacco.—Fresh and dried leaves.

Vervain.—Best made into a tea.

Vangloe or zezegary.—The seeds and tops have the same quality as ochro.

Yellow thistle.—Seeds as an emetic.

Worm-grass.—Decoction of the plant. There are many plants that go by this name; the real species, as described by Browne, is not common in this part of the island.



ERRATA.

- Page* 1, line 21, for "will" read "shall."
13, line 13, for "this" read "the."
15, line 21, for "and" read "when."
22, line 38, for "blister" read "blisters."
23, line 8, for "if they be" read "it may be."
note 2d, line 3, for "gum ammonia," read "gum ammonia
cum."
36, note 1st, line 1, for "cod," read "add," and *dele* the comma,
inserting one at cinnamon.
54, line 23, for "some" read "the same."
56, line 26, after "is" insert a comma.
line 27, for "where" read "whether."
86, line 28, for "poison" read "poisons."
106, line 8, insert a full point after the word person, and begin "to"
with a capital T. *Dele* the semicolon.
108, line 37, after "end" insert "then."
insert a semicolon after "down."
for "in the," read "in this."



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