On

Dysentery

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On Diphtheria.

Diphtheria is a disease which may be considered, in a sense as Pandemic, being confined to no particular country, or class of persons, it is liable to occur in persons of all ages, and at any season of the year. In this country it is not now as frequent, or formidable as it was formerly. Indeed it was wont to be spoken of as one of the diseases most fatal to the inhabitants of this country. In London alone, the annual mortality used to average about two thousand, and often it reached as high as four thousand, but the numbers have gradually decreased so that at present, one hundred fatal cases, are considered as deserving the name of an epidemic. In the tropics it is still a formidable
and frequent malady, and constitutes a main part of the practice of a Physician, in those climates. It has been said that in Hindostan, it is more fatal to the Natives, than all other diseases taken together, and, as may be learnt from the works of Bell, pall., Arnielly, Bawder, Johnson, and others, it is very prevalent and fatal among Europeans in that climate.

It is one of those maladies which often become epidemic, and spreads over vast tracts of country, in such cases also it is most frequently very destructive to life; a brief notice of the more remarkable of these visitations, is given by Copland in his Dictionary.

It has often been observed to attack itself to armies engaged in active service, or in encampments. Dr. James McEigh has designated it as the "scourge of armies" and says it is the most fatal, of all their diseases. In two years and a half in Spain, the British Army lost 2717 men by Dysentery.

In British home practice, isolated cases now and then occur, and chiefly in the Autumn.
Predispensing Causes.

The causes which are considered as predisposing an individual to an attack of Delirium Tremens, vary in different instances. One of the most frequent seems to be an habitual exposure to high ranges of temperature, such as living in a warm climate, or in a temperate one, where the summer has been unusually severe, this it is supposed acts unfavourably on the constitution, by causing general relaxation of the types of the body, thereby rendering the individual incapable of enduring fatigue, or of resisting the various exciting causes, to which he may be exposed.

The evil effects of a hot climate to, are often conjoined with a craving on the part of the individual himself, after certain stimulatic articles of food and drink, by the use of which he expects to shake off that state of listlessness and inaction, to which the state of the temperature has given rise.

Thus nothing is more common than an application to the all-powerful influence of the bottle, whenever a person feels himself at all "out of sorts." Ballingall has men-
honed this, to be a customary indulgence on the part of soldiers in India, and is quite of opinion, that it is one of the circumstances, to which the frequent occurrence of this disease, in that climate, is to be principally referred.

General debility of the alimentary canal, also, from whatever cause it may arise, frequently gives a predisposition to the disease. This may be the effect of the use of a too stimulating diet, or of a deficiency, either in the quantity, or quality of the food, or other injesta; thus in warm countries, where during certain seasons of the year, there is a deficiency in the supply of water, the inhabitants are forced to use that which has been collected in tanks, or other reservoirs, and at such seasons, it has been observed, that Depentery is very apt to become prevalent.

Persons of a Dietetic habit of body, those who are habitually constipated, are said to be more liable to the disease, than others. The previous occurrence of such circum-

stances, as tend to lower the power of resistance on the part of the individual, also seem to be frequent causes. These persons, consumed from fevers, or other wasting diseases, are peculiarly obnoxious to it. It has also been observed, that anxiety of mind, disappointments, bad news, or in short, whatever tends to depress the spirits, act unfavourably in giving scope for the supervision of the malady. The news of a defeat, or such like, has often told on the troops to a greater degree than habitual exposure to the vicissitudes of the weather, and the bad effects of confinement have been sufficiently demonstrated, in the cases of besieged towns, and on board slave ships.

It is said, that it is also very liable to occur in persons who have been obliged to undergo excessive fatigue, or long continued exertion. Those of the Rheumatic diathesis also, seem to be predisposed to attacks of this disease.
Exciting Causes.

Of these, the most common is exposure to cold after or during profuse perspiration, indeed a sudden check to this function of the skin, is very likely to be followed by an attack, whether the disease be prevalent at the time or otherwise. This seems to be very often the case with troops, who after marching or other fatigue, encamp on wet or damp ground.

Pringle, in his account of the Diseases of the Campaign in Germany A.D. 1743 attributes the breaking out of the disease to the exposure of the soldiers, on the wet ground after fatigue, & exposure to the heat of summer. He says: "From the end of August to the middle of September, there fell a great deal of rain, and the men who were out on foraging parties, were not only often wet, but the ground, on which they marched, was encamped being low, retained the rain water. Hence by the 1st of October, there were in hospital four hundred and fifty ill of Dysentery. Dr. Johnston also mentions cold and wet, as exciting causes of
This disease especially after fatigue & exposure to the heat of the Sun, he relates his own case as an example of this. 
Pingle mentions an instance in which, the disease was brought on, by a man indulging immoderately in drinking cold water, while in a state of profuse perspiration.
The exhalations from wet, and marshy ground, have also been held by some, to be frequent causes. Dr. Barcroft asserts, that for the most part, Diaperenter is produced by the same causes which give rise to remittent fevers viz: heat, and marsh myriads. Although he does not venture a hypothesis, as to how the effluvia in question, come to exercise a morbid influence on the bowels.
The effluvia from animal bodies in a state of decomposition, have often acted as exciting causes. Sydenham refers the epidemics, which took place in London in the year subsequent to the memorable visitation of Plague, to the air being infected, by the effluvia from the numerous bodies, which had been interred in, and around, that City; during...
the previous year. And at Ciudad Rodrigo, it was also attributed, to the fact, that nearly twenty thousand bodies had been interred, either in the town, or immediately under the walls, in the space of a few months. Parry mentions a case which happened in a person immediately after smelling some blood which had become putrid by standing in a vessel, for some months. The eating freely of fruit has long been held, to be another frequent cause.

Seydenham says: "This disease may proceed from eating fruit freely, especially if it be unripe, or drinking fermentable liquids upon its particularly new wine, beer, cyder, and the like. The most noxious fruits are said to be Sweet Cherries, Peaches, and Plums, especially the large yellow Plum. Parry denies the influence of fruit, in producing the disease for on one occasion, he observed, that the disease became prevalent when no fruit could be procured, except strawberries, of which none of the men partook; but as the season advanced, the disease abated, although
the soldiers indulged in the eating of grapes in great quantities.
Other observers also mention the use of fruit as an exciting cause of dysentery, but it is probable that its influence has been greatly overrated.
Irregularity in diet, undoubtedly often has an injurious effect, such as partaking of unwholesome articles, as meat which has been too long kept, stale fish, unripe, discolored, or ergotized grain, &c. Dr. Annesley states, that on one occasion, dysentery became very prevalent, among the British troops in India, & that upon investigation he traced it to their eating, the fish of the country, to their breakfasts. Upon putting a stop to this practice, the disease altogether disappeared.
The use of stagnant, backflow, or marsh waters for drink, often also produces it, and drunk creek has often been a cause of an attack.
Famine, in some instances has had the effect of causing dysentery, and in other cases, the taking away of some article of food to which the person has been long accustomed.
Contagious Nature considered.

Different observers dispute, the contagious nature of this disease, and this, most likely, in consequence of the different circumstances under which it has been presented to their notice. All the older observers, seemed to consider it as contagious, and it is only within a comparatively recent period, that it appears to have been at all disputed. Shaw in his notes on Sydenham's works, favours the idea of its contagious nature and supposes that it is owing to the exhalation of malignant poison, from the bodies of patients, by insensible perspiration, or from their excretions, milk, or sweat. Pingle is also of the same opinion, and states that this property is most manifest, when the slow fever which precedes mortification sets in, as a ground for his belief, he states, that when Dysentery raged with fearful violence, in the main body of the army, 1743, that three companies, who had not joined the main body, but encamped at a little distance,
were exempt from the disease, although they breathed the same air, carried the contagion, eat of the same victual, and drank of the same water. This immunity lasted for six weeks, till the army removed from Havana. When these companies joining the main body, and marching in the line, were at last infected, but as the disease was on the decline, they suffered little. The decline of the disease after leaving this place, was attributed to their leaving behind them, the infectious privies, the foul staws, and accumulated filth, of a long encampment. Herden also believed it to be contagious, though he confesses that he never saw two persons in the same house, at one time, afflicted with the malady. Cullen declared that it was always contagious, and that it is by the propagation of this contagion that it becomes epidemical, independent of cold or any other exciting cause. On the other side of the question, appear the
names of Ballingale, Bumpfield, Banerst, Johnson, and others. These gentlemen who all treated great numbers of cases, and consequently were well acquainted with the disease, declare, that they never on any occasion, observed any circumstance which tended to excite even a suspicion, if its being contagious. Dr. Banerst indeed allows that it might be contagious, if it existed along with Typhus Fever; but at the same time, he expresses a doubt as to any such combination taking place. With all due deference to the opinions of others, I cannot believe with Johnson, that the opinions of such men as Pringle, Callan, and Hunter, are to be entirely thrown aside. For, I think it is perfectly evident, that in certain cases, it undoubtedly has this property, as in cases of slave ships and to my mind the example adduced by Pringle appears to be perfectly conclusive. Besides certain authorities state, that they have seen it communicated to a healthy person by the juice of an sneea apparatus.
Post Mortem Appearances

The large intestine is the part which is principally affected in this disease, but it is not by any means, the only one in which abnormal appearances are to be looked for, for sometimes, the whole extent of the intestinal canal, from the stomach downwards, presents important lesions which are not to be neglected. We must therefore examine the intestinal canal in its whole extent, and at the same time, pay great attention to the complications which may exist in the liver, pancreas, and spleen, together with the state of the pericentary and peritoneum. The urinary bladder also is sometimes affected with inflammation, probably more on account of its proximity to other organs, undergoing that process than from any primary affection existing in itself. We shall first describe the appearances, usually presented by the large intestine, those proceeding upwards, and notice some complications, which may occur in the small
intestines and Stomach, after which the conditions of the Liver, Spleen, Pancreas, 
will be considered.
As the disease affects the large intestine 
in a more marked degree than any of 
the other Viscera, it has received the 
name of Colonic.
On opening the abdomen, the Colon is 
frequently found to be greatly distended, 
either uniformly throughout its whole 
course, or alternately distended and con 
stricted, sometimes on the other 
hand, it is quite flaccid and empty. 
The morbid changes in the interior 
are often observable through the 
Peritoneal coat: when they present an 
inflamed, hard, or gangrenous app 
pearance, but not extending farther, 
than the proper walls of the gut; 
In some cases, however, there are ad 
hesions of the Peritoneum to the 
adjacent structures, or in more severe 
instances there may be complete per 
foration of the serous membrane and
consequent effusion of the contents of the bowel, into the cavity of the abdomen, in such cases death may have been the effect of severe Peritonitis, induced by such effusion.

More frequently however, only the peritoneal and muscular coats of the bowel are affected, and they may afford examples of every description of morbid change of structure, which can be presented as the effects of inflammation.

On opening the spot, we may in many cases observe simple increase of vascularity, imparting to it the appearance, as if it had been injected, then these may be thickening of the tissues of the bowel, in various degrees, even to the extent of filling up the canal, considerably more than one half, and presenting an appearance, such as might suggest the idea of its being a solid structure like a rope. The cells of the colon may in consequence of this, be almost obliterated, and the relaxed state of the "segmentor's bands," which often are half corrupted, or entirely destroyed, may ends the cellular...
arrangement, in some places the bowels may be constructed, as if a ligature had been passed round them.
The villous membrane presents a velvety granular aspect, or it may be atrached, there are also frequent distinct ulceration of this type, beameared with bloody current, mixed with specks of jaundiced matter, or the follicles may be the seat of hard punctular or fungous commences, which have been likened to small poppy; they are not punctures howevor; but present a solid appearance on being divided. The mucous membrane is also often observed to be dotted over with black or brindles pustule, if variceous edges which have been described by some as gangesiums, but others has refused them to extravasated blood, in the submucous type; some times however these are other spots, observable on washing off the adherent mucus. These vary in size and shape, in size from one eight of an inch to half an inch in diameter, they are
sometimes round, but more frequently irregular in figure, and are generally covered with an albuminous coat, which is tinged with the pigment of the bile, when this coating is removed they disclose to view irregular ulcers of the mucous coat. These appearances are most frequently met with in the transverse arch, and sigmoid flexure of the colon, though not by any means entirely confined to these parts, but often seen throughout the whole extent of the large intestine; when these ulcers are of small size, they are collected into groups, and are numerous; when large they are fewer in number, and placed at some distance from each other. At some places, these ulcers affect only the mucous membrane, at others they penetrate and destroy the submucous areolar tissue, and they may even penetrate the muscular coats of the bowel so that nothing but the Peritoneum remains between the interior of the bowel and the serous cavity; in extreme
cases, this latter structure has been observed to have given way, and effusion of the contents of the bowel to have taken place in consequence.

When this ulceration affects the mucous membrane only, the spots present a pale reddish, or greenish brown appearance, when the submucous tissue is affected, they are more of an ashy colour, and are treated with bloodvessels, the muscular layers give a darker colour, without the streaks, but when the Peritoneal coat is exposed, there is thickening and reddening of it, and most frequently a patch of effused lymph on its free surface.

An attempt at reparation has been noted by some observers. The loose margins of the ulcer being bound down, by lymph, to the muscular or Peritoneal coats, thus gives the appearance of an elevated ring enclosing the surface of the ulcer, and from it proceed filaments of lymph, among which, may be seen
Minute blood-vessels, presenting a reticular structure, as their filaments proceed in development, they drag together the edges of the core, while the ring begins to be detached, at length there is a deposit of a film of lymph, which forms a cicatrix; but there is no reproduction of true mucous membrane; when an ulcer has thus been healed, the Peristomeum presents a puckered appearance, as if a small portion had been included in a ligature. The Pustules as they are called, present different appearances. In different cases, they are evidently follicles under different forms of degeneration. First: the follicles may be simply enlarged and indurated. Second: The subfollicular tissue may contain tubercular matter (as in pathological subjects,) and lastly: they may present a rosy appearance, with cracks or fissures at the apex. Any of these forms, seem liable to induce an ulcer of an incurable kind," which has often been the cause (according to some) of sleeping up, a Chronic
form of Diarrhea, after the true Dysentery symptoms had disappeared. Sometimes true gangrenous decomposition takes place, (most frequently in the Rectum and Cecum) which in its incipient stage is recognized, by a greenish tinge of the surface, which cannot be removed by the sponge; in some cases it has advanced to complete effacement and sloughing of the tinges of the gut. Scybala, which are often mentioned as occurring in Dysentery, are seldom met with in diarrhea, but quantities of gummy blood are often found, and fluid pieces of a natural colour, are not uncommon at the upper end of the large intestine. While these changes are observed in the lower portions of the alimentary canal, it is somewhat singular, that in the vast majority of instances, the small bowels are perfectly healthy. But at times there are considerable evidences of inflammation, in the lower
part of the Ileum, and when the Ileo-cecal valve has been destroyed by ulceration, there has been observed, intussusception of the small intestine, part of it having entered the Cecum. In Ballingall's case, there occur twelve instances of inflammation of the Ileum, and in one, the Stomach was also implicated, in another the entire extent of the bowels, from the Stomach (which however was sound) downwards, presented a dull brown tone as from inflammation.ingle gives a case where "the intestines were whitish *modified, and the Stomach partly so. Theomentum has been observed to be adherent to the bowels, and also inflamed; the fat presenting a gelatinous appearance sometimes it is thickened, and at other times is shrunken and quite destitute of fat, or it may be gathered into a firm knotty mass. It has been found adherent to the brim of the Pelvis, and to the abdominal parietes, more frequent by it is displaced, either upwards, to
the transverse arch of the Colon, or to one side.

The Rectum and Mesocolon are generally more vascular than usual, especially in the complicated forms, as in Scrofulous Dependent. The Rectum and Glands are enlarged or inflamed, rarely suppurated, but when this latter does occur, it is generally in a part corresponding to a large ulceration. It is said that in the Dark Races the glands of this region are always more or less diseased. The Pancreas is not often implicated, but it may be found enlarged and pressing on the common duct.

According to Ballingall the Spleen also is seldom affected, but in several instances notable lesions have occurred, more particularly, when Dependent has occurred as a sequel to Intermitten Fever. Parry gives one case, where it weighed three pounds, eleven ounces, but was apparently sound; in another it was “corroded.” It has often been noticed enlarged and soft.
ened, even so much as to appear diffused, but in general there is no marked appearance, and these cases just referred to are decidedly exceptions, although where intermediates are common, induration and enlargement, may be looked for. The appearances presented by the LIVER vary greatly. In cases examined in this country, it is most frequently found but in tropical climates where the cases of this organ are common, various complications involving the Liver have been described. It may be enlarged as in a case given by Pringle, where it weighed ten pounds. It may also vary in colour, being sometimes darker, and at other times lighter than is natural. It may be inflamed, or even suppilated, in some cases, especially in those called Hepatic or in the Scrofulous complication, the Liver is sometimes large, stiff, and spongy, or resembles rotten cork. Rilling all quiet a case where small white spots, were observed on the concave surface, but the
does not give any particular description of them, he has also mentioned a case, where
distinct abscesses were found, near the large
omentum lumen. Abscesses have been noted
by other observers. Dingle says that in
one case he found the outer coat of
the liver punctured.
The gall-bladder is generally distended, (al
though it is sometimes empty and flaccid)
The bile contained in it often presents a
thickened andropy appearance, or it
may be darker than usual, and thin, or
of a fluid consistence, with coiled portions
floating in it, the bile has been observed
to be thin and light-colored having a
resemblance to serum.
Inflammation of the urinary bladder often
takes place in consequence of its proximity
to diseased organs, and whenever during life
there has been great pain above the Pudic
and Urethra, this complication may
be expected.
Progress of the Disease

Acute Diarrhoea, generally begins with urging sickness, as in nearly all other inflammatory states, by flushes of heat over the whole body, (sometimes however there are symptoms of the topical affection previously,) the bowels may be loose, accompanied with an unusual degree of flatulence, and an uneasy sensation over the abdomen. Then there may be Diarrhoea, after this severe griping pain is felt in the bowels, and frequent and unreasonable calls to stool, with an irresistible inclination to strain over it. At first but little is voided in these attempts, but by degrees, the stools become more frequent, the tension more severe, and the straining more painful. The evacuations become more copious, and are of a fluid consistency, streaked with blood, and without any peculiar taint. Along with these symptoms there is loss of appetite, and frequently sickness, nausea, and vomiting.
ing, very distressing to the Patient.
The state of the Pulse, at this stage
is seldom altered. The skin is a little
hotter than usual. The tongue is not
altered, but the Patient complains
of great thirst. If the disease be not
checked here, it advances, and the symp-
toms become more distressing. A fixed
pain is felt in the hypogastric region ;
locul at the sides, and fulness of the
abdomen ensues, with a feeling of
tension and pain (along the course of
the Colon) which is increased on pressure.
The skin of the belly becomes intensely
hot, and imparts to the hand
the sensation, as if it had touched
a piece of heated metal. The Pulse
becomes accelerated, and the tongue
is white, flabby and furred. The evac-
uations are now more frequent, though
less is avoided, and the stools seem to
have lost all traces of natural juices,
which are substituted by dry, lalone
masses, or substances resembling fat.
or piece of flesh, consisting of masses of congealed lymph, or fibrin of the blood, or stringy bruiser alone, or mixed with blood, or they may be entirely composed of a peculiar kind of gelid and bloody brown matter, which has been likened to water in which raw beef had been macerated. The termine and term FACTORS now become very urgent, especially in the morning, and the urine scanty and high-colored is passed with difficulty, or it may be entirely suppressed. The Patient is troubled with an agonizing thirst, and prefers cold water to every thing else. (The act of drinking is usually followed by termine). The tongue now becomes red and dry, and may be glossy or glairy in its appearance or may be chapped and cracked, and it thrust out with a tremulous motion. The heat of the skin continues, but a profuse perspiration sometimes succeeds. The Pulse may be felt bounding as in fever, and communicating a thrill
under the pressure of the fingers.

The face becomes pale, shrunk, and anxious, and the appatite sinks, the Patient losing all hope. The stools are paved involuntarily, and now acquire a very offensive factor, exuding portions of decom- 

braneous matter, (Ancon? ) and quantities of 

pus, prolapsus and frequently occurs as the result of the straining. Vomiting 

returns accompanied with hiccup, and aph- 

thetic appears in and around the mouth. The pain ceases suddenly, announcing the 

event of mortification, and sometimes portions of the bowel are evacuated, in the 

form of slough. The sufferer now begins to sink. The Pulse becomes less frequent 

and weaker, Sordes collects on the teeth, the skin becomes cold, and clammy, from perspiration; and a peculiar cadaveric odour is obvious. The Patient dies at a period varying from 12 days, to 3 or 4 weeks, from the 

attack. In tropical Inflammatory often as early as the fourth day. In other cases the disease is arrested before the urgent symptoms
Different Modifications.

Simple Catarrhal Dysentery.

This form generally manifests in some degree of the bowels; it occurs chiefly in delicate persons, and among the poor and ill-fed, often following dyspeptic fevers, or occurring during their prevalence. It generally commences with the usual signs of diarrhoea preceding constipation; in some cases it begins with signs attended by tenesmus, and frequent calls to stool. Dull pain is generally felt in the abdomen. The appetite fails. There is great thirst; the tongue is furred, and there is a bad taste and clamminess in the mouth. The Pulse may be more frequent, but it is small and weak. The temperature of the body is slightly increased. The stools are frequent, blood seldom appearing in them, before the fourth or fifth day. They are also
confusion, do not present edema, but are exceedingly fretful. The patient generally expresses himself easier about noon. Accomp is not unfrequent, and prostration and sometimes occurs in children, and delicate persons. The urine is seldom altogether retained, but it is scanty and infixed with more or less pain. Fiee form of the disease does not appear to be contagious, it generally appears with one or other of the forms about to be noticed, generally the Typhoid. Typhoid Fever may appear where numbers of people are gathered together as in barracks, on board slave ships, &c. The patient, at first complains of bottle-ness, with headache and stiffness, and prefers dark situations. On account of the light, starting his eyes. He has also pains in the limbs, and back, soon he becomes aware of terminus, and is plunged more or less in
feels a weight and pain over the region of the heart, and becomes the
sore. The tongue and mouth are foul and clammy, and the breath
acquires an offensive odour, the thirst
at this time is urgent. The Pulse is
rapid and small, the stools are fre-
guent, with a considerable deal of grip-
ing and straining but little is voided
at a time, consisting of clayey or sewage
matter very fetid and tinged with
dark blood. The Urine is high-coloured
ed and scanty, and is often thick.
Sometimes there occur a number of
distinct petechial patches on the
cheek and breast, often also on the
arms and abdomen. The tongue
and tenesmus diminish and are
replaced by a colliquative Diarrhoea
about the ninth or tenth day, when
Epistaxis often takes place. If this
diarrhoea be not checked, delirium often en-
perseness. The muscles become soft and
flabby, and the skin of a dirty colour
and often spakes a fatal return
If not arrested the disease may carry
off the Patient, from the fifth to
the twentieth day after the attack.
This form is evidently often contagious.

Biliary Dysentery.

Under this division I will consider those
cases which are marked at the com-
mencement by the presence of excess of
bile in the evacuations, whether
the disease depends on an accumula-
tion of that secretion, in the Bili-
ary passages, or a vitiated character
of the bile, arising from primary dis-
case of the Liver, in both of these var-
ieties the symptoms are very much
alike, and the difference seems to
lie to consist in the intensity of the
symptoms more than in any diagno-
the mark peculiar to each.
In that variety called the Hepatic flux
by some writers, the symptoms are
most acute, though not by any
means the most fatal.
It is generally preceded by chills, drenchy amounting to distinct rigor, by pains
in the forehead, vertigo, and very
often bilious vomiting occurs. The
tongue is white or coated with a yellow
or bloody froth; there is often a bilious
burning at first, to which succeeds
a scalding pain in the Rectum, and
tenerness. The evacuators in this
stage may present an almost in-
finite variety in colour; green, green-
ish-black, reddish-brown, yellowish
or ochre, or of a serous and watery
appearance, with a greenish froth on
the surface, or sometimes inky-black.
Blood, seldom appears in the stools
until the tenerness has subsided.
There is generally pain in the epiga-
stric region which is increased
on pressure. The pain often extends
to the right shoulder, with a feel-
ing of weight on the right side
of the thorax; and a dry cough
there are also feelings of constriction over
the region of the chest, and sometimes
considerable difficulty in breathing.
The Pulse is rapid, and at night
the symptoms are aggravated. The
evacuations are very frequent and give
only temporary relief. There is generally
a great degree of flatulence, which
causes the goosy appearance on the
stools. After a while the evacuations
become of a whitish colour, frequent
mixed with portions of half-digested
food, and are frothed with whitening.
This is called the white flux, and
is much dreaded by the soldiers
who seem to be acquainted with
its intractable nature.” (Ballingale)
The symptoms continue and hiccup
is often superadded. The Patient re-
jects all aliment or medicine. The
thirst is very urgent but the Patient
is scarcely able to swallow from the
hicups. The Pulse continues rapid.
The tongue is red and dry, often coated
near its base, the skin imparting a feeling of greasiness to the fingers, and emaciation advances. This form often continues for weeks or months, and may destroy the patient from mere weakness, or an abscess may occur in the liver, or gangrene take place in the colon. In other particulars it agrees with the simple dysentery before described.

In the other form of bilious dysentery, the first stages of the disease resemble the former, without the feeling of pain in the thorax or the abdomen, and is generally of a more asthenic nature. There is pain in the back and loins, and the same is constancy, and is sparged with a scalding sensation. There is also often pain over the pubis. The pulse is at first rapid, and of good strength, but soon becomes weak from loss of blood, which, in this complication of the disease is spared in great quan-
this, either in a fluid or coagulated condition. There is distension of the abdomen, and the patient experiences mighty exacerbations, with reminiscence of pain and uneasiness towards morning. The discharges emit a fetid odour from the first, and in severe cases it may almost approach putridity. The tongue is red and dry, and the skin is hot and parched. As the disease advances to an unfavorable termination, the temperature rises, evacuation advances, becomes suffocant, and there is often delirium. The patient dies about the end of 3 or 4 weeks unless the disease assumes a mild form, when it generally passes into the chronic type. Both of these varieties are very common among Europeans in hot climates. The first among those who habitually indulge in ardent spirits, the latter in those who are exposed to cold after hot days, and the fatigue of business.
Pueril or Malignant Dysentery. This variety which is generally most fatal, occurs among the poor in times of famine, and in beleaguered towns, where the air is infected with the exhalations from putrid animal bodies; very often also in ships lying at the mouths of great rivers, (as at New Orleans, or on the coast of Africa, where it is often prevalent,) and in insanitary situations, where low fevers are common. It is preceded by debility, and pains in the limbs, with anorexia, foul tongue, feelings of nausea, and sometimes vomiting; then the bowels become relaxed, and flatulence is a general concomitant. The Pulse is weak and rapid, the countenance pale and anxious, and the spirits are depressed. There is rarely any straining at first, and the discharge from the bowels are scanty, and very foetid, and bloody. Reops occur at intervals. As the disease progresses, the breath becomes
Fetid, the tongue is covered with a blackish mucous, which also collects on the lips, and aphthae are often observed in the mouth.

The stools become more frequent, and are cadaverous, dark and fluid, and teneurous supervenes. The skin assumes a dark yellowish appearance, and is dry; the muscles become relaxed and flabby. The patient sinks into a state of stupor, or delirium. The faces and urine are praxed involuntarily. The skin of the abdomen is hot, but the feet and legs become cold, and a peculiar fetid odour is exhaled by the body. The patient dies at a period of from five to twenty days, according to the severity of the attack.
Chronic Dysentery

Dysentery may be of a chronic nature from the first; that is, it may assume a mild and subacute form which still refuses to yield to treatment, or it may become chronic after the severity of the attack has subsided, or it may be a sequel to some other affection such as Diarrhoea, Fever or Cholera. When the disease has been of a subacute form from the commencement, the febrile symptoms abate, and the appetite and strength return for a time, vomiting and tenesmus disappear, and there is only a soreness and sense of weight in the abdomen. The discharges are less frequent, than in the acute form, and are more copious. The symptoms are worst during the night. The Pulse through the day is not accelerated, but becomes is toward evening, it is weak, and sometimes
irregular. The stools are mucous or gelatinous, often streaked with feces, and the blood is either intimately mixed with them (impacting a brick-red colour) or is distinct and sometimes coagulated. They present a variety of appearances, varying in colour from a whitealbuminous tint, to a greenish-black, or from a chalk and water appearance to that of a dark jelly. The tongue is of a dark red and glossy appearance. The skin dusty, dry, harsh, and scaly. The face sunk and palid. The abdomen is turgid and hard, not painful on pressure, except over the course of the colon. The lower limbs are often attenuated and the body becomes greatly emaciated. The evacuations inhale a peculiar acid odour, abstinence often follows, and the patient sinks with the symptoms of hectic, after many weeks or even months.
lapsed.
The form of the disease may be associated with affections of the Liver and in children Wound are most an unfrequent complication; in children also Prolapso bile is apt to occur.

Dysentery very often happens in the persons of individuals afflicted with Swine and Rheumatism and in those troubled with Thromboids. These complications have been described by authors as varieties of Dysentery, but they may be regarded as cases in which two diseases occur simultaneously, and where the Dysentery symptoms are super added to the constitutional invalidity. They therefore require no separate description.
Diagnosis.

The Diseases with which Dysentery is most apt to be confounded are Diarrhea, Cholera, Melena, and the Bleeding from internal Haemorrhoids; but with a little care in our investigation and observation of the symptoms, the Diagnosis may in most cases be easily made.

In Diarrhea, although there are griping pains, and the stools are both frequent and loose, still they are fecal and though there may sometimes be slight streaks of blood in the stools, there are never such copious discharges of blood as are seen in Dysentery, in which the natural feces are retained, or are discharged from time to time in hard separate lumps, known as Scybala. In Fever the fever never rises so high as in Dysentery. This may be considered as a diagnostic sign, when taken in connexion with the other symptoms.
Diarrhea may also in some cases be mistaken for Epidemic Cholera. E.g. when it is accompanied with vomiting and retention of Urine, but as in the latter disease there is never Blood in the stools, this may be considered as sufficiently diagnostic. The fact also of Cholera being Epidemic or not at the time, must be taken into account, but even if it be Epidemic, the Rice-water stools, the coldness of the surface, and the speedy prostration and collapse which attend Cholera, are never observed to attend Diarrhea, at least in this Country. Diarrhea may also sometimes present symptoms, which in some degree resemble this disease, but it is not so apt to be mistaken for it. The evacuations are not so fluid and resemble far more than Blood, and there is seldom any tenesmus, and the preceding symptoms are very dissimilar.
Bleeding from internal Piles, sometimes bear a considerable resemblance to
Disenteries, especially to those cases in which the Rectum is the first
principally affected. The straining and descent of the bowel at stool
occasioning great pain at times, and the admission of blood in the evacu-
ations may greatly resemble this
Disease, but with slight attention
to the general circumstances of
the case, we may always make out
the real nature of the affection, which
we are called upon to treat.
In Bleeding Piles the Patient will
most generally have noticed the
fact of their presence, before bleeding
has supervened; or if he should
not, the colour of the blood in
the evacuations is generally a dis-
tinctive mark, and the presence
of the natural faces is not to be
mistaken. The intervals of comfort
which the Patient experiences in
The case of hemorrhoids are not observable in Dysentery.
Whenever there we meet with a case in which there are violent pains of a gripping character in the abdomen, with frequent discharges of blood or mucus, from the bowels accompanied with distressing tenesmus, and retention of the natural evacuations, or the passage of them in the form of occulted mucus as the general system at the same time, in a state of excitability and tendency to Prostration, we may safely I think pronounce it to be a case of Dysentery, and proceed to treat it as such.

Diagnosis
Whenever the stools become less frequent more copious, and the faces appear turgid with bile, and the Patient begins to rest better, the Pulse at the same time becoming more natural; and the
tongue appearing moist, a favourable termination may be looked for. The thirst abates, and the appetite returns, the skin also becomes softer and smoother. The tumours and tenesmus disappear, and at last the Patient emerges from the disease considerably weakened, but yet approaching health.

If the disease be mitigated by treatment, but the stools continue to be tinged with blood, and the urine is stained in appreciable quantity, the other symptoms being of a more accelerated character, it is very apt to assume the chronic form. The bilious variety is the most liable to become chronic, whenever it passes the thirty-sixth day. If the symptoms in the more ethereal varieties do not begin to yield to treatment before the twentieth day, it is most generally fatal, but if they are not very severe, it may also about this time assume
the chronic form.

If the malady be suddenly checked by astringents, especially in emetic cases, it is apt to pass into fever, or to induce disease of the liver or Peritonitis. Peritonitis is very often a sequel to dysentery occurring in female females. When there occurs steroracous vomiting and other symptoms of illness, it is generally a sign of internal sequestration of some portion of the bowels and is a very unfavorable symptom.

It is also unfavorable, if the pain be sudden in its accession, and remains fixed at one point, if the exhaustion of the patient be due to loss of blood or want of sleep. When cramps occur in the lower limbs, when the face becomes shrunken and acyanotic, and the body dehydrated, if stupor or delirium ensue, if the skin assume a dirty hue, and exhales a fetid odor, if the tongue be raw, glossy,
or dark red, and sores appear on the teeth, or aphthae in the mouth; if the Pulse be weak and rapid or intermittent; if the respiration be laboured, or the breath be cold or foetid; if the senses be partially lost; if ulcers appear on the surface; if Paralysis of the Extremities takes place, and the substance vomited or Jaeved by stool are of a purulent or cadaverous nature; if complete suppression of the Urine takes place. Necropsy also in the advanced stages is an unfavorable symptom. And in the chronic forms, if hectic supervenes, or if ascites or edema of the limbs takes place, it is unfavorable.
Treatment.

The great variety of remedies, which have been administered for the cure and alleviation of this Disease, by different Practitioners in various parts of the Globe, must not be passed over without some notice; for, while some remedies may be found preferable in certain circumstances, it does not therefore follow that others are productive of no benefit, or decidedly injurious as some agents, and it appears to me to be worse than folly, to reject the opinions of certain individuals, whose experience in the treatment of this disease, at once extensive and successful, has been recorded for our instruction and guidance. The treatment must be regulated according to the stage to which the Disease has attained, for it is very evident that complications of various kinds are apt to ensue as the Disease progresses, and these complications must be
combat by appropriate remedies, as they present themselves to our notice; so that what may appear to be advantageous at the outset, may afterwards be of little or no effect, in mitigating the different emergencies to which the malady may lead in its onward progress.

Among the various remedial means employed in Dyseuntury, the one which seems to have enjoyed the greatest reputation as effective in alleviating the suffering of the Patient, and subsiding the inflammatory symptoms (both at the outset and at the Disease advances) is Blood letting either General or Local.

Sydenham was so convinced of the efficacy of General blood letting, that he laid it down as a rule, that whenever we are called to treat a case of Dyseuntury, we should immediately direct bleeding from the arm. Pringle also recommends
The general depilation and believe that as the Disease is so often accompanied with inflammatory symptoms and plethora, that blood letting is always conducive to the cure, but he says that if the blood be not dry and the fever not kept up by some extraordinary inflammation, the repetition of the bleeding is neither necessary nor advisable, as it may happen that the strength of the patient may require to be kept up. Bleeding has been recommended by almost all writers on the subject, among these are Chalmers, Abercrombie, Johnson, Bangsfield, Somers, Ballingall, Lascombe, &c.

The majority is not all of these advise it to be used only in the early stages. General Bleeding is however seldom had recourse to now in this country but it seems still to be a valuable auxiliary in warm climates, where it is extensively employed and apparently with great success. Of course
it is only applicable in cases of the
Symptomatic or inflammatory type, and
that early in the Disease. It generally
sufficed that one bleeding be
made, repetitions are however in some
cases necessary.
Local depressions do not seem to have
engaged the attention of medical men
to such an extent, as general bleeding
but while there are many who recom-
mand them. Leeches are the means
generally employed for this purpose
Dissley (~) in a letter to Sir G. Ballingall
all recommends. The application of
Leeches in acute Diarrhoea a practice
he had followed with marked suc-
cess. Sir George also mentions that
S. Arthur advised the Leeches to be
applied to the extremity of the Rectum
as the most direct application of
typical blood letting in inflammatory
affections of the bowels, and he i.e.
Ballingall is of opinion that this mode
of applying them may be beneficial.
D. Abercrombie & Dl. Graves followed this practice. Dr. Watton recommends the application of leeches along the track of the colon, when pain is complained of in the rectum. This is the course I have been pursued in the Royal Infirmary here, and evidently with the result of greatly relieving the patient. Dr. Field advised cupping over the sacrum when pain is felt in that region, especially if Deferent and Denucens be urgent.

Watton have been held in high repute by some, e.g., Ballingall, who says that he can vouch for their efficacy, and when fixed pain is felt in any part of the colon, they cannot too soon be had recourse to, indeed there can be no doubt that they are often of service in diminishing the pain. But unfortunately they are very apt to degenerate into ones of a very troublesome nature, which
may keep up the irritability of the patient after the true Peritonneal symptoms have disappeared. Ballingall mentions a case where, after the application of a blister, crystallization of the abdominal parietes occurred, and proceeded to such an extent, as to lay bare the Peritoneum.

Blisters are also very apt to increase the irritation, which already exists in the urinary passages, and I am of opinion that if used at all, they should not be allowed to proceed to accretion, but be removed as soon as the surface has become reddened; for this purpose a Spirit of Turpentine or a Spirit of Pernice will generally suffice, without leading to the ulcerous effects likely to be produced by Carantheides or other isecant applications.

The use of Purgatives or gently cathartic medicines, has been advocated by many, especially at the outset,
either for the purpose of ascertaining if the bowels be overloaded with feculent matter, or to satisfy us that septa are not the cause of the symptoms by keeping up the irritation, or with a view to remove such. When their action is not followed by increased discharge of feculent matter in any form, they had better be discontinued, as they generally tend to aggravate the suffering of the patient.

Various descriptions of these medicines have been recommended viz. Neutral Salt, Colonized followed generally by some other medicine such as Epsom or Soda. Some prefer the Pharmacian Laxatives. Laxatives are not to be employed in all cases however but whenever any hardness or fulness is felt in the Colon or Eecem or on examining the abdomen; or when the matters evacuated have been offensive from the commencement or the Patient complains of a sense of fulness or stuffiness in the bowels.
or if coffins be panned: then laxatives are certainly indicated. On the other hand if there has been a copious diarrhoea at first, they should be either altogether withheld or very cautiously employed. When also there has been an evacuation of the natural juices for some time, a mild purge may be exhibited, as the retention may prove a greater cause of irritation than the evacuation. This may be assisted at times by an enema of a mild or emollient deposit.

Enemata however may be useful in another way than the one just indicated, as for allaying the pain and tenesmus, diminishing the frequency of the stools, and replenishing the discharge of blood and mucus. They ought not to be too large, or they may tend only to aggrivate the symptoms they were intended to extinguish. Various substances have been employed to follow out this indication. Bath with Theriac. decoctions of prune seeds.
and Marsh Mallow; Congee water and
Sandarac: A weak potion of deco-
ire sublime with Indigo and dextral
cents; and the Black or Yellow
wash, with various others.

Anodynes are most generally recom-
manded either after a laxative has taken
effect or after depletion has been prac-
ticed. Opium, Hyoscyamus, Belladonna.

Mixtur of Acid and Tobacco have all
their advocates, under different circum-
stances. Opium stands first among
these, and may be given by the
mouth, or used as a suppository, or
rubbed in, in the form of an ointment
over the abdomen or even inside the
Rectum. If its sedative action be
required it may be given alone, in
doses of from one to four grains, or
it may be combined with other medi-
cines, as with ipecacuanha when a stu-
Dynamic effect is wished, or with
Colonel when the bilious secretion is
scanty, and the Liver just activated.
dressed, or with antiseptics in chronic cases where the discharge are profuse. Syphilis was in the habit of alternating Syphilis with dermatitis. Some are of opinion that Syphilis are decidedly injurious as in the bilious and typhoid and certainly they ought never to be prescribed where there is a tendency to delirium or where there is great exhaustion, as they tend to aggravate the dyspepsia may be given in the same cases, and in the same combinations as opium. Belladonna is recommended as likely to allay the spasm of the intestinal muscular fibres, and also to diminish pain. Tobacco in the form of infusion applied by way of instillation to the abdomen, is recommended by Dr. Grass. Perforic acid is generally combined with Camphor, or Perinate, or Sepacambe, and is said to be of great utility. These however are only to be had recourse to, in the early stages of the disease.
Diaphoretics. These have been before alluded to, as in the case of combining Opium with Ipecacuanha. They are generally given and are indeed most beneficial in the early stages of the disease. Antimony in the form of James Powder is often chosen, some give Dovex Powder, or the Ipecacuanha and Opium. Others the Arqua Bécastis Ammoniae. And in the atheric forms of the disease, the Spiritus Arétis mixt with Spiritura Opii. These may be assisted by warm or tepid baths or warm poultices to the abdomen, or by friction of the surface. These seem to act by directing the circulation to the surface and by alleviating pain, and in producing a tendency to sleep, the Diuretics may also lend to restore the discharge of urine, the suppression of which is a cause of great suffering to the Patient. The combination of Opium has also a tendency to diminish the frequency of cold
to start, thereby allowing the patient a better opportunity of obtaining rest.

These remedies have been extensively employed, but some are inclined to think that they are injurious, but there is reason in supposing that they may act beneficially by removing from the stomach any injurious substance it may contain and also prepare the way for the action of other remedies. But their utility (when used extensively) is much to be questioned, unless indeed they are given along with other medicines such as opium with a view of (dancing) the patient and at the same time (promoting) perspiration and allaying pain. Spermacochea has been greatly lauded and has been administered in doses of from 3f. to 3f. combined with forty or fifty drops of carbamune. These doses although large have in some cases been followed with beneficial results. It is some
times combined with mercury in the form of a pill. 

Mercurialis have enjoyed a great reputation among Physicians for the treatment of malignant. They may be given solely with a view to obtain a gently laxative effect, or as alternatives either on the dinner of Stomach, or with a view to procure their specific action on the system. Of course the different intentions, have led to different ways of exhibiting them as remedies. With the first of these situations Calomel is given alone, or along with some gentle laxative medicine, such as Rhubarb, or Tincture of Seneca, the doses may be 4 or 5 grains. With the second intention Calomel also is given, in about the same doses repeated, at longer or shorter intervals, to fulfill the third indications. Calomel is also generally preferred and is given in doses of from six to eight grains, at short intervals,
or sometimes in smaller doses, which seem to some (e.g. Johnes) to be preferable. It may be assisted by rubbing in the Unguentum Hydrargyri over the abdomen, or the application of the Emplastrum Ammoniaci Hydrargyri. Mercury should be withheld if acute disease of the liver exists, or when inflammation is suspected in that organ, but in other cases dependent on chronic hepatitis it is thought by some to be the more sure item. It is of most benefit in the subacute and chronic states, and when its specific action is early manifested it may generally be looked upon, as a favorable symptom, and vice versa. Indeed when the system seems averse to be affected its use may be discontinued. Copland says that in such cases its use favors the occurrence of relapses and delays convalescence. Various other remedies have been held as likely to be successful in that dis-
Astringents of various kinds are recommended by various authors, they are best when given in subacute cases or when the fever still progresses. Recently, the use of dracunculicide, with quinine seems as good as any. Lime water seems to be a favorite with some. Tonics are also used which had best be reserved from at the beginning of the acute forms of the disease, and they ought indeed always to be used with caution, even in advanced cases of the apparent kind. In the acute forms, they may be used more freely and are generally administered in combination with quinine or diaphoretics, being preceded by depletions and expectorants when required. Calomel is used Cinchona, Carcilla, Cuprum, Sinauruncum, and the Willow Bark, have each their advocates. Antiseptics such as Charcoal and the Chlorides have also
been recommended, with various other substances too numerous even to allude to in a short sketch like the present. With those already alluded to, as one I think, need be at any rate, to prescribe for any case however complicated. To direct any set form of treatment for a disease which assumes such a variety of types and forms would be simply absurd. The indications of cure however are evident enough. They are

First: to remove the patient from the exciting or other cause.

Secondly: to subdue inflammatory action by antiphlogistic measures.

Thirdly: to promote secretion of the skin and kidneys, and determine the circulation towards the surface.

Fourthly: to free the bowels from inoffensive or irritating matter which they may contain.

Fifthly: to protect (as much as possible) the mucous membrane from such
Eighthly: to correct the morbid states of the blood and secretions in the arteries. Bilious, Scorbutive or Melancholy forms.

Seventhly: to support the general system from sinking of the vital powers seem likely to fail.

Eighthly: to eradicate urgent symptoms and to watch the progress of the disease, to be able to obviate any tendency to aggravation.

Ninthly: to guard against relapse and to promote convalescence by a careful management of the Patient and the administration of suitable Diet.

During convalescence it is of the utmost importance that the Diet of the Patient be attended to; nothing of an indigestible kind should be allowed him. His food should consist for the most part of farinaceous or starchy such as rice, tapioca, &c.
with a little beef tea, or some animal gelatine in the form of jelly and not too highly spiced. He may partake of milk for drink or weak gruel, but should avoid cold water as much as possible. He ought to have warm clothing and avoid all exposure to cold. Change of air, and exercise on horseback also tend to promote recovery. And warm or tepid bathing is advisable.

Prophylaxis.

Much may be done in the way of prevention. Careful dietary restrictions in tropical countries are very important both in the articles of food and drink. Careful abstinence from all indigestible substances such as unripe fruit, heavy pastry, and hot meat of all kinds, especially pork; all highly seasoned or richly spiced food must also be avoided. Total abstinence from, or at least very
Springy use of all avoid and simu

uous liquors especially in hot cli
cmates. Care is also to be taken to
avoid of profuse exposure to the
direct rays of the sun, and sudden
checks to perspiration. Avoidance of
wet feet and keeping on of wet
clothes. Also the exposure to the cold
night fogs incident to tropical coun-
tries is to be avoided.

Overcrowding in confined places with-
out free access of air, is also to be
guarded against. Removal of the
dick from among the healthy and
also the use of the chloride in the
neighbourhood of the privies.

Personal cleanliness, and frequent
ablations, especially the use of the
warm bath, are of great service.

The wearing of warm clothing and
flannel next the skin, and keep-
ing the bowels gently open, but the
avoidance of all severe symptoms is
necessary. And lastly, to keep
the mind free from a fear of taking the disease.
If these indications be followed
there is good reason to hope for immunity from the malady.
"And" (as Sydenham says) "let this suffice for the Dispensary."

William Henry Macfie.