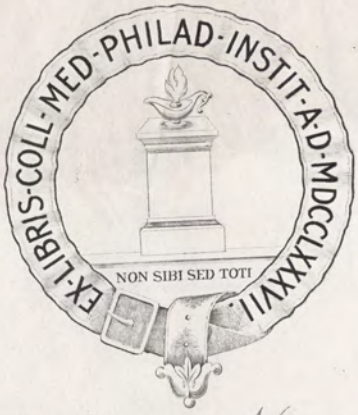

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Notes from Barton

Vol. 1st

Notes

from a Course of Lectures on the

Institutes and Practice

of Medicine

delivered in the University of Pennsylvania.

By

Benjamin Smith Barton M.D.

Lecture, 1st. 1814

Gentlemen,

I come now to the most important, and by far the most difficult part of the course; it is to teach the practice of physick; – and in doing this, I agree with the learned Professor Dr. Cullen, that we should endeavour to give instructions for discerning, distinguishing, preventing, & curing diseases.

The art of discerning & distinguishing diseases, continues he, may be best obtained by an accurate and complete observation of their phenomena, by means of which we may arrange diseases according to their several genera & species, which arrangement is founded upon observation alone, abstracted from all reasoning; the prevention of diseases, says the same author, depends upon a knowledge of their remote causes, and so far I concur in opinion.

with him, but I am far from believing that their cure depends "chiefly unavoidably" upon a know-ledge of their proximate causes, for many dis-eases are often cured, when we are ignorant, not only of their proximate but of their remote causes, In short, I know not what a proxi-mate cause consists in, and shall say but little concerning it in this or any other course of Lectures.

Nosology.* Is an arrangement of diseases according in classes, Genera & Species, including the

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* More than an arrangement, it is a description

Cullens definition of Pyrexia is after shivering a quick pulse, increased heat, with interruption and derangement of the functions diminution of

the phenomenas by which we distinguish them.
An arrangement I contend is indispensible in all systems

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of strength weakness of joints.

Fever. Pyrexia, after languour lassitude and other seques of debility without any primary local disease—

Intermittents, Fevers arising from Marsh Mearmata consisting of many Paroxysms with intermissions returning with shivering One paroxysm a day.

Systems.

How could we do without it in Natural History & Botany much less in diseases. I do not propose any regular System of Nosology, as Cullen and others before me have done — nor shall I expect any thing of that kind from the Candidates for a Degree.

All that I at present maintain is an arrangement according to their several affinities, such an affinity no Physician can doubt. Do we not perceive it between Gout & Rheumatism and between Leucorrhea & Catarrh — and between Dysentery & hemorrhage: and where then is the impropriety of connecting them together? Systems of Physick like all others may be incorrect, but that does not argue that they cannot be improved. [X]

[X] Are not Systems of Natural History & Botany as yet, imperfect?

Dr. Rush, to be sure was opposed to Nosology; but he could not do without this arrangement of diseases, as they appeared to him allied by their natural affinities.

I will begin with **Fevers** (A) Because it is the most universal of all diseases, but before progressing further, I must inform you, that I differ materially from Doctor Cullen, who considered the Tertian Quartian & Quotidian as so many genera; they can be considered

(A) See, Cullens Nosology.

without any primary or local affections, derived by some from "fervere" to burn. — By others from februs to purify, supposed anciently to be a faulty state of the fluids —

Many other equally equally erroneous opinions succeeded.

be considered only as Species or varieties of the same disease because they are cured by the same Remedies; Evacuents and Tonics.

Simple Fever. B is a disease sui generis; it is different from a Symptomatic, because that has its origin from a local cause — I shall consider the phenomena according as they appear in Fever of Ephemeral duration — The patient is first affected with a sensation of Coldness, frequently pervading the whole body, but often confined to particular parts, he complains of it in many instances excessively on the surface, while in the majority of cases it attacks the extremities & particularly the spine resembling the pouring

B Most common & most dangerous affection & constitutes nearly two thirds of human diseases. The division of Fevers into febrile & non febrile incorrect for many diseases very different are brought together.

pouring of cold water on the part. Sometimes the sense of cold is entirely local, and sometimes seems to pervade the bones entirely. It varies as regards its duration, sometimes when the chill is short the hot stage is ~~short~~ long and vice versa; This I particularly remarked in the yellow fever 93— It is not to be considered as absolute cold, but only as a sensation, for in febrile cold the temperature of the body is not at all diminished.[d]

This cold stage is sometimes attended with head ache, coma, pain in the loins & cough, the latter occuring principally in persons of delicate make, narrow chest & liable to catarrhs, none of which are to be considered essential phenomena of fever as they do not always take place, the pulse is generally quicker and more frequent.

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d The professor this year 1815 — adds that the temperature of the body is slightly diminished though never less than 90° Far.

Tho' some pretend to say that they have remarked a preternatural slowness of the pulse during the cold stage; which assertion must be received with caution, for I have never observed it, neither has Dr Cullen except in that stage of lassitude which precedes the cold stage. The pulse is seldom under 90 do. and rarely over 160.d When it is small & debilitated, hard & full, or weak and intermittent, it is indicative of great morbid action, ℞ —— Another symptom very

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℞ The pulse is subject to many variations, in feeling it we should always attend to the age of the patient, thus in Children, it is small and frequent and becomes slower as the age increases; in infants it beats 130 in old persons about 50 or 60. Boerhave founded his definition of fever entirely on the pulse, saying it depended on frequency, Like Heberden I make no distinction between celerity, velocity quickness & frequency of the pulse, The

very constantly attendant on fever is an increased heat of the

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The Intermitting pulse is generally dangerous; but the pulse is in a few instances, preternaturally slow in fever: Sydenham & Werhoff (Physician to Geo. II.) have both seen many cases. Leroy has seen a slowness of pulse prevail in a fever which took place in Naples. Dr. Rush agrees also, that it may be sometimes preter-naturally slow in fever.

F. The sensation of heat is greater than the abso-lute heat; the heat of the body has been known however to arise to 112.d Far. — Doctor Curry has seen it as high as 105.o — Cullen says the heat of the whole body is in-creased.

of the body, sometimes of a pricking nature and then constituting the Calor Mordens of Pringle & others. Increased thirst is sometimes attendant even to an inordinate degree; but it is not an essential concomitant, for it is not always present. The Natural functions are for the most part much affected, the appetite is greatly diminished, there is a loathing of animal food, nausea & vomiting frequently of a bilious matter and sometimes slightly tinged with blood, The vomiting takes place principally at the end of the cold stage, or commencement of the hot. I consider this state of the stomach as an essential feature of fever, tho' I can't say that it always attends; for I have known the stomach so slightly irritable during the whole period of fever, as not at all to resist the taking in of Medicine. This vomiting is more common in the U States than

in Great Britain or Europe.

Debility is a very constant attendant on, and may be considered a uniform character of fever, though it is by no means always present, for we sometimes observe a morbid increase of strength as in mania — Febrile debility resembles that produced by intoxication & is subject to varieties, being greater while in an erect posture in bed, than while lying down. H

Anxiety also accompanies fever and a sensation of a peculiar kind felt in the region of the heart & Stomach, constituting the anxietas precordealis of Hoffman. — An affection

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H I do not consider this as absolutely debility, tho! the system is somewhat weakened. very sober people on the first attack of Typhus & Yellow fever are thought to be drunk. Debility indeed is an essential part of fever, it was considered as such by Sydenham, Hoffman, Boerhave the elder Monroe and Dr. Rush.

An affection of the intellectual powers occurs for the most part through the whole course of the paroxysm, particularly as relates to attention & recollection. Delirium sometimes appears in the cold stage, but is more common in the hot. In some violent fevers, there is very little delirium and in some fevers none at all.

There is generally a want of natural & refreshing sleep, attended with a troublesome and disagreeable head ache.

Frequently the sensation of the head does not amount to a pain, but merely to a Capitis gravitas. Fever will not admit properly of a concise definition but may be said to consist of Coldness, heat, thirst, and confusion.

During the cold stage the respiration is small frequent and anxious, in the hot stage more full and free, but is still more frequent & anxious,

which anxiety is not mitigated till the flow, of sweat when it disappears.

These then are the most striking phenomena of Ephemeral fever; such a one as an Epidemic, I have never seen, though I have observed a few scattering cases of this kind in the year 93. I have also known Intermittents to be finished by a single paroxysm.

An absence from fever is called apyrexia, and the length of time intervening between the end of one paroxysm & the beginning of another is called an intermission, and the length of time from the beginning of one paroxysm to the commencement of another is called an interval. The most common interval is 48 hours, that of 72 hours is not so frequent; but that of 24 hours is the most common in the U States, there are also Quintans, Sextans & Octans, which last I have seen strongly marked in

Jaundice,[D] — A paroxysm rarely continues longer than 24 hours, and if not then completely finished there is sometimes a remission of fever constituting the remitting fever[I] — which is especially marked by the subsequent paroxysm, commencing with the cold stage, but if there be no cold stage & the subsequent paroxysm be marked by an exacerbation of the hot stage, its is called a continued fever, but if there be no remission whatsoever, and there exists as it were but one complete paroxysm it is called a continent fever, which I have more than once seen in my practice.[K]

D When a number of paroxysms occur, the intermissions are in general nearly equal.

I. The Remittent fever is frequently of a very dangerous character I consider the yellow fever between Remittent & continued.

K - A continent fever rarely continues longer than 7 days

Of the Crisis of Fever — This is denoted certain evacuations as of faeces, urine, sweat &c these may be either salutary or indicative of death, the favourable seem to be known by the falling of the pulse during the evacuation, to the natural & healthy standard [L] and if it does not occur we may be assured the patient will not derive much benefit from the evacuation.

The discharge of sweat is the most frequent, next to that, is the discharge of Urine, which is pale during the cold stage, red during the hot, and deposits a latuitious sediment at the close of the paroxysm — [⊙] it is this sediment accompanying the plentiful discharge of Urine that especially makes the critical discharge, but the most complete & certain solution of the fever is the occurrence of spontaneous

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[L] It is also favourable often when it sinks below the healthy standard.

[⊙] Especially in intermittent & phlegmasia, though fevers are often terminated by no perceptible evacuation.

discharge from the bowels.

The issue of Fever (particularly fever of high action in plethoric habits) is characterized by other evacuations besides those just mentioned, viz a violent Hemorrhagy, particularly Epistaxis which is favourable in the beginning, but in many instances the harbenger of death, as in low and Chronic states of fever — Spontaneous Salivation, which is very rare, but occurs in confluent small pox, when it is always salutary. A solution of fever by an alteration in the secretion of the tongue is also very common. Sometimes sleep particularly in acute Mania. P

Much

P - Also by a discharge from the Nares, the appearance of the tongue is often of service. I know of a Physician who will never give Bark untill he discovers the tongue to be come moist, Hoffman also supposes that the symptoms before a crisis are often aggravated at first

Much has been said of the necessity of the knowledge of Critical days ever since the days of Hippocrates, the author of their existence in the books of Medicine. they were maintained by the credulous De Haen, the illustrious Cullen & the late professor Rush, but I see not a single fact in support of them & consequently reject them as being superfluous & unimportant. b

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at first, and then a healthy action takes place; this forms what he called perturbatio critica, but I know nothing of this. —

b If there were such things as Critical days, I am persuaded they would be plainly seen in some parts of the United States, besides these we find the founders of these days resting them on the most trifling basis. Thus Hippocrates supposed every critical day to be governed by the number 7, neither De Haen, Cullen or Rush have advanced any proofs of their existence, & indeed we

(continued)

b continued

and indeed we cannot fix upon a day, for we cannot state the precise time that the fever commenced or when it has ended, and we often see those fevers terminating on noncritical days, The defenders of these days say, that we cannot observe them now, on account of our not giving nature time to act, but as the practice of Hippocrates was mild he often observed them, but the practice of this great man was very energetic for we find him using Cantharides internally, Melampodium, Hot Bath &c and on the contrary the mild practitioners of the South of Europe make no mention of these days, Celsus says, that Asclepiades who practised in the same climate & place as Hippocrates, & not long after him, ridiculed this idea of critical days / both climates similar to that of Greece) deny the foundation of them – Rush & Darwin, neither of them bring any proofs of this theory, I therefore do not believe in them, tho' I cannot entirely disprove them.

Of Intermittent Fever.

For the particular phenomena of this, I refer to Dr. Cullen's first lines, also Darwins Zoonomina and John Browns Elements, where they are both elegant and accurately detailed.

Intermittents are of two kinds, regular & irregular the first when paroxysms come on at regular periods, the 2nd at irregular.

They occur particularly at 2 seasons viz- Spring and Autumn, hence they are distinguished by the terms vernal & Autumnal— The first is of an inflammatory type in general, and the second for the most part of the Typhus & Bilious nature, though the vernal is sometimes conjoined with the Bilious symptoms. A

The vernal

(See 3d page on

A Although a regular Intermittent consists of a number of paroxysms with an Apyrexia between them, Yet many of the Southern practitioners say

(continued over leaf)

A continued) they never can find in their climate an Apyrexia in an Intermittent, but we may take the above as a general definition – Intermittents prevail in every part of the World. A quotidian is when the fever or paroxysm returns every 24 hours – a tertian 48 – a quartan 72 – there are also Quintans Sextans, Octans, Nonans &c – ~~The~~ Ariccia Werkloff and van Sweiten, have often seen Quintans, Sextans are very rare, two cases have been seen – Boerhaave has seen a Septan – Octons are more common, but the only case I ever saw (as I related above) was in the case of a lady who had Jaundice with a swelled belly, She had a regular attack of fever every Saturday morning for 3 months, & was cured by Arsenic, Blisters &c – There have been cases of Nonans also & Werkloff has seen intervals of 14 & 15 days Such cases I suspect are more frequent than we imagine; but as

A continued) but as many persons do not notice longer intervals than 4 or 5 days they are not noticed. There is also a double quotidian having 2 paroxysm every day, but this form I believe is generally a Remittent; also a double tertian having a paroxysm every day with the first & third similar to each other, this form often accompanies Hepatitis, dropsy's. Vernal intermittents often run into a typhus state as was the case last Spring;

The vernal is stopped in its course by the diseases of summer, the Autumnal is cut short by the coming on of frost.

Patients rarely die in the Cold stage, tho' it has been asserted by some authors that in some countries old persons are extremely liable to be taken off during that stage, Yet I have never met with an instance, but here observe that it is especially in the hot stage of Intermittents and likewise in the approaching form of the same disease.

Durations of the cold stage vary from 15 minutes to 24 hours, Vernal Intermittents are sometimes salutary as they have prevented Gouts Rheumatism Gravel, but they are more frequently alternate with these diseases and many others which will be mentioned hereafter, but Autumnal Intermittents are always prejudicial. The consequences resulting from protracted intermittents are an emaciated state of the System, enlargement

of the liver, spleen &c — producing Dropsy, incurable Jaundice impairment of the intellectual functions &c. (*)

(*) Quartans have the longest cold stage, but shortest paroxysm. Quotidians have shortest cold stage but longest paroxysm — Dr Linne has never seen death produced in an Intermittente except in the hot stage — and Dr Stoach has seen many old persons in Germany carried off in the cold stage — A paroxysm is divided into the Cold hot & Sweating stages — The Cold stage is ushered in by a Lassitude & sense of Coldness as if water was poured on the back, the skin is corrugated the teeth shatter & there is a shivering of the body, often a bitter taste in the mouth & anxiety — sometimes it is ushered in by severe pain, & Coma takes place in some cases

The hot stage comes on gradually and at first alternates with Chills, the heat experienced never rises as high in the Intermittente as it does in the continued fevers. Head ache turgidness of the eyes

(continued)

Of the Prognosis of Intermittents.

Quartans are the least dangerous, but most obstinate & liable to relapse — The following are favourable appearances; pustulous eruptions about the mouth, spontaneous salivation unaccompanied by aph-

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delirium flushing &c frequently occur in this stage. The pulse is fuller, stronger, though less frequent, than it is in the cold stage, the Urine is high coloured, and at the close deposits a lateritious sediment, the blood is often of a buffy appearance, with the serum of a deep yellow colour, this last symptom perhaps occurs much oftener here than in Europe. After a short cold stage, there is generally a long hot stage, but often we find no proportion between them. The hot stage continues from a few hours to a whole day, it is general-ly terminated by the flow of sweat which generally relieves the body, though quartans are often terminated without any sweat.

aphthous tongue; Aphtha is very unfavourable, Cutaneous eruptions which are attended by itching, enlargement of the parotids in the commencement of the complaint, a moderately oedematous swellings of the limbs, such as is produced by Arsenic, when long protracted obscure hearing, a termination of the hot stage by copious sweat, a moist skin during the interval & a copious discharge of Urine, But patechial spots, much dropsical swelling, scarcity of Urine, Ulcers of the fauces, Diarrhœa, yellowness of the skin, long continuance of the hot stage without being terminated by sweat & dry skin in the intermission are unfavourable, to which may be added, they are more dangerous in hot, than in cold climates, & more so when accompanied by malignant epidemics, such as plague & yellow fever, because they are apt to assume the form of Intermittents.

Of the Remote Causes. :□:

The effluvia from moist Wood, Cold, and some say contagion which I do not believe, the exhalation from living vegetable matter as Stramonium, the odour of this plant is exceedingly strong and disagreeable so much so that it can readily be distinguished a quarter of a mile — I have known Tetanus & Hydrophobia produced by its, Dr Bard of New York informed me that an Intermittent prevailed on the Skirts of that City which could be attributed to no other cause than the large

:□: The remote causes have been divided into Idio & Kaiso Measma, the former arising from persons or animals, the latter from vegetable, living matter and from the decomposition of dead matter, as in marshes swamps &c, but it is often difficult if not impossible to tell whether a disease has arisen from the one or the other. Thus Typhus is known to arise from both causes.

Quantity of this vegetable growing contiguous to ~~that~~ place L Lastly marsh Miasma is the most frequent & by far the most general cause; its nature is unknown, Chemists have attempted to find it out by an Analysis of the air above those places, but were unable to detect any properties in it different from those of Atmospheres in general d.

Linnaeus supposed it to be argillaceous earth which was taken into the System by being exposed to the influence of this Miasma H. and indeed the opinion seems in some measure substantiated

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L Intermittents were very rare at Vincennes near the Wabash before Stramonium became common there, a law was therefore passed, to have it cut down—

d: Priestly supposed this state depended upon a poison intimately combined with the air— Rame supposed it to depend upon moisture alone.

H: But many of Linnaeus's arguments are very trifling.

Dr Mitchell

-ted by an observation of Dr Brown's who said that Intermittents are more common in the argilla-ceous Countries of Scotland, than any other parts; but in fact we know nothing of its nature, It has been said that the pollon of vegetables is productive of Intermittents, but I see no reason for this supposition for they are every year plentifully diffused through the vicinity of this place without causing this complaint; the

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H. continued) Dr. Mitchell of York, says that the air is pervaded by a peculiar acid which causes the disease, and this being neutralized by coming in contact with the argillaceous earth renders it inert, & says the intermittents therefore seldom pervade calcareous countries – This opinion of his I think unfounded and not worth notice – Dr Walker of Scotland says that Intermittents are unknown in the vicinity of large quantities of Peat Moss even though there is exhalations from this,

the truth is that the air which scatters the pollen brings along with it the Miasma which causes Intermittents [I]

Of the time of the Miasma's entering and Affecting the System.

This varies from 2 hours to 20 days, I have been the same evening affected with an intermittent after having been exposed to the influence of Miasma

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[I] Blighted grain may be also a remote cause, whether Miasma be of one or different kinds, it is difficult to say — Dr Cullen says it is the same only different in less or greater degree — A German Physician related that Rotterdam had been for some time affected by Intermittents in consequence (as it was suspected) of a large quantity of Marshy ground near the Town, in attempting to drain off the water a large quantity of mud was exposed to the influence of the Sun and the Town was immediately seized with a Plague.

Miasma on the banks of Schuylkill, though I have informed you that my System is very susceptible to such causes – Dr. Darwin also informs us that he was affected with an intermittent the same evening often having inhaled the Miasma. Dr John Hunter has justly observed that it may lie dormant in the System upwards of 20 days without being called into action by exciting causes, many instances of which fell within the sphere of my knowledge. To this I will add, that the ap-pearance of Intermittents may be suspended by the interposition of more powerfull diseases, as Measles, Small pox &c. N.

N. Dr. Curry seems to think that contagion is taken in through the medium of the lungs – I however think the Stomach by far the most probable avenue. As to the distance to which contagion may extend, Dr Rush thought 9 miles to be the furthest, but as we can often perceive the scent of matters on shore when some distance at Sea I think it may act much further.

Of the Cure.

I will follow Dr Cullen in his 3 general indications for the treatment of this disease – 1st in the time of Intermissions to prevent the recurrence of paroxysms – 2ndly In the time of paroxysm to conduct them so as to obtain a final solution of the disease. 3dly To take off certain circumstance which might prevent the fulfilling of the two first indications.

I begin with the treatment of the Intermission which is by almost all authors conducted by the administration of Tonics and Astringents. It is the opinion of many that remedies act here exclusively from their roborant principle; but I disagree with Dr. Cullen who says, the recurrence of a paroxysm depends exclusively upon the recurrence of Atony in the extreme vessels, for many of the infermentia put a stop to this disease, when it cannot be alledged that they do it by a tonic principle – However I will assume the principle at present that the

chief of the medicines which cure the disease depends upon their action unquestionably upon their tonic power — I shall divide these Medicines according as they are taken from the vegetable animal & mineral Kingdoms. And first from the vegetable — at the head of which I shall place the Cortex Peruvianus of which there are 3 species, viz Lancifolia or pale Bark — Longifolia or red bark — & Latifolia or Yellow bark — of these the pale :R: is by far the best, because it is the least liable to produce puking purging hemiplegia & other consequences generally ascribed to bark; the next in quality is the yellow, but it is generally much adulterated; and the worst of all is the red, being

:R: This was the only species known to Sydenham and he complained of its being much adulterated

the most liable to produce purging &c —
The whole of them are bitter, astringent, & aromatic, upon which last property we need not rely for the cure of diseases under consideration; the febrifuge principle is confined chiefly to the astringent & bitter quality[S] — Of the proper time for administering the bark during the disease — Dr. Sydenham & Morton never administered the remedy at the commencement even of an apyrexia — and Sydenham was of opinion that the disease should be suffered to continue some time that, that the System should get rid of a morbid something which might exhaust or destroy the patient if we were to interrupt the salutary

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[S] The virtues of Bark were once supposed to depend on a peculiar quality denominated Chincanism but for this opinion, I think there is no foundation.

salutary effects of Nature in her struggles to throw off this noxious matter, but this opinion was as incorrect as his practice; and many no doubt have suffered from the consequences incident to intermittents from the pursuance of this plan. But in opposition to this plan of treatment I would inculcate the practice; never to suffer an intermittent to pass by even after the occurrence of the first paroxysm, without administering the bark, if the pulse & stomach will permit. I have the authority of Dr Lind for this practice who had the finest opportunity of seeing the result of the two methods - in many he has seen the disease strangled after the second paroxysm by the timely administration of this remedy. When in others, while it has been neglected for some time during the continuance of the disease dropsy & Jaundice have followed. Of the most

effectual time to give it during the intermission. It has been the practice of Dr Cullen & others to give large doses immediately before the cold stage, and almost entirely to neglect the administration of it, during any other time of the intermission, but this is by no means a correct practice, with very few exceptions, for so great is the irritability of the stomach at that time that it would either reject the bark, or receive but a small portion at best — I consequently withhold the bark at that time, and always give large doses at the commencement of an Apyrexia. But in quartans we are to give large doses at all times, not regarding the restrictions I have mentioned — as Dr. Heberden always found them more completely removed by giving large doses just before the accession of the Cold Stages, and in the Apoplectic Tertian, I

I especially inform you never to omit a moment in giving this Medicine, & like Cullen throw down large doses at the commencement of the cold stage ——— Many eminent physicians give this Medicine at all times of the disease, not regarding the intermission hot stage, cold stage or sweating stage. This is the opinion of Dr Clarke of Indostan & of physicians of hot climates, for I have found that the bark given at any time during the febrile paroxysm more especially during the hot, exacerbated every symptom. Yet in very warm climates such as the Southern parts of Georgia & South Carolina Florida &c — The experience of those Gentn on that account must influence us in some degree, They remark that it is particularly beneficial given during the hot stage, if the skin be moist; and here then it will be proper to use it though only in hot climates, and should always be

withheld if the skin be dry, except during the intermission.

Of the dose Many practitioners are in the habit of giving no more than 15 grains 3 or 4 times in the course of 24 hours, when given in such small quantities it is of no use, we sh.d never give less than ʒi at a dose and that carr.d to the extent of ʒiv in the 24 hours, the medium dose is ʒiss. X.

Of such additions as improves the virtues of Bark. In the vernal Intermittents where phlogistic diathesis is for the most part present these additions are not to

X. The best mode of giving bark is internally by the mouth, it is also given in Enemas; also by wearing a waistcoat quilted with bark, I have often cured the Intermittents of Children in this manner, but it should always be taken off during the paroxysm.

not to be made; but in Autumnal where a Typhus tendency is remarkable, there is an almost absolute necessity of the substances from the vegetable Kingdom; the first I shall mention is the Serpentaria; this may be given in powder or in tincture or decoction during the intervals of using bark, so as to use a vulgar phrase to wash it down — 2ᵈᵒ The bark Cascarilla; I must say something respecting the unhappy fate of this article, Alpinus thought a remedy of the first importance in the cure of Intermittents and the Italians preferred it even to the Peruvian bark, It has something of an aromatic & stimulant nature, and consequently in Vernals it is not proper to use it, but in those sweeping intermittents which have pervaded some parts of Virginia & Pennsylvania it is peculiarly

suited because all there assumed the Typhoid Type — 3rd. Capsicum & 4th the powder of mustard combined with bark, both highly improve the powers of this medicine, & I have employed them when thus combined with the happiest effects, they are to be used singly in conjunction with the bark. The rationale of their efficacy is the same with what we said above viz they are only to be used in Intermittents of a typhoid type — 5th. Camphor is an important addition ℥j of this to ℥ij of bark was found in India equal to ℥ij of bark given alone — 6th. Opium which has been employed extensively in Ceylon in those violent Intermittents which prevailed there and which commonly proved fatal in two paroxysms, it seems they used it principally

on account of its stimulating property & to calm the irritability of the Stomach, but in the United States it is especially useful to prevent the purging of the bark — Hemlock is another article which has proved successful in Italy when Bark has failed — Among all the additions I am less able to explain the rational of the combination of Crystals of tartar which has been successfully employed in all parts of the U States — It is probable that it is particularly adapted to those intermittents having a tendency to visceral obstructions, Constipations & Dropsy, but this I must confess is very unsatisfactory.

Of the additions from the Mineral kingdom

The most important is Arsenic, which has cured ~~well~~ when bark has failed — Mercury,

I must observe with respect to this article that I have never known it to cure an Intermittent, But after Bark has been used insuccessfully a slight Ptyalism certainly prepares the System to be more effectually acted upon by the tonic power of this article.

Of the Substitutes for Bark.

There are various, 1st Salix or Willow of different kinds, Cornus Florida, the different species of Magnolia, the prunus Virginiana — 2nd Substances of a more stimulating nature as the Cortex Angusturæ, Calamus, Turpentine Mustard Garlic &c — 3d from the Mineral kingdom we have as useful substitutes for the bark viz The Sulphate of Zinc — Sulph. Cupri, Iron Lac. Sat. & Arsenic — The white Vitriol or Sulph: Zinci has been found very successful in

in Tennessee, I have never employed the flowers of Zinc but I have been informed that they have cured Intermittents when the bark had failed.

Of the Blue Vitriol Dr Donald Monroe was among the first who brought this medicine into notice as a remedy for Intermittents and its reputation is not without foundation for I have employed it in about 8 or 10 cases with success where the Bark & Arsenic had failed, it is generally accompanied by Nausea, when its efficacy is improved, yet it is always proper to combine with it the powder of ginger or some aromatic, we should commence with doses of from 1/16 to 1/8 of a grain 3 or 4 times in 24 hours and increase very gradually according to what the stomach can bear,

Its modus operandi is similar to arsenic — Iron I have used with considerable advantage both combined with and during the intervals of using the bark ※

Saccharum Saturni, will certainly prevent in many instances the recurrence of a paroxysm of an intermittent, but it is a dangerous remedy & should not be employed till all others had failed, and then with much caution & if it should not produce a good effect in a few days we should discontinue it. —

Arsenic, This is by far the most important of the mineral substitutes and may be considered little if at all inferior to the Peruvian Bark — It is

※ This Article however is by no means powerful in the cure of Intermittents — 3 or 4 grains may be given 3 or 4 times in 24 hours.

It is the white oxyde of Arsenic that is chiefly used, for the regulus is an inert substance I have principally given this medicine in the Apyrexia, though I do not think it is by any means so necessary to abstain from its during the paroxysm as the Bark, It is much better adapted to some than others, & those to which it seems peculiarly suited are the bernal or such as are characterized by a plethoric diathesis and not those of a typhus type, I saw this fact exemplified in the years 1804 & 1810 and I think the intermittents of 1813 have been much of an atonic character for they generally resisted the powers of arsenic — It is necessary to observe with respect to this article, that should it produce no evident effects in the course of a few days say 3 or 4 it should be laid aside — Thus after you have administered 2 grains, which I think sufficient to ascertain the result of its use, and there should appear no manifest alteration for the better, it should be

rejected at least for the time present & you sh.d have recourse to some other article, which may be better adapted to the cure of the disease —
I do not wish to be understood to say that is not at all suited to the cure of obstinate inter-mittents — For Dr Fowler has succeeded in the cure of many of that character by the agency of his solution given in doses of 8 or 10 drops given 3 or 4 times during 24 hours, the Dr has very justly observed in relation to this article that it will frequently fail when used alone, but will succeed when combined with bark, for I have had many opportuni-ties of observing the success of this practice and advise it to be followed whenever the arsenic is used both in the remitting and intermit-ting fevers — Of its Modus Operandi, I am not disposed to believe that it acts in the cure of Intermittents in any manner by its roborant

power, for among the first effects that we perceive following the use of this Medicine is nausea which constantly attends throughout its employment. Now many and in fact all the Tonics properly administered impart to the stomach a degree of activity & tone essentially different from the use of Arsenic, Besides the patient after using it for some time in the convalescent state is extremely debilitated and his system relax?— a remarkable instance of this kind I saw in a patient in the Pennsylv.a Hospital to whom I prescribed the Arsenic pill which cured him, but left him in so debilitated a state that he fell down in his attempt to walk. Another consequence attendant on Arsenic is an Oedema of the whole body, but especially of the feet and hands; which effect results from its relaxing the tela Cellulosa a circumstance very different

from the effects of tonics since they increase the contractile power of that membrane. Yet arsenic when given in extremely small doses will increase the tone of the stomach in some degree though none can say that it is from this slight degree of poborant principle that it cures intermittents. This Oedema resulting from the use of arsenic I have named Oedima Arsenicale, it is quite innocent, readily disappearing as the patients gains strength, when it appears we may be assured the disease has been conquered, though I cannot positively assert that arsenic will never cure unless producing this effect, yet I can say that of all the cases which have come under my care and which have been cured by this remedy there was more or less swelling & in all in whom it failed there was no Oedema. From all that has been said it will be readily granted that arsenic is not a tonic, but properly but

belongs to the Medica Mentem Infermentica. when it does not cure Intermittents, my experience enables me to say, that like Mercury it enables the System to be more readily acted upon by the bark; and I will observe again, that it is not at all suited to intermittents of a Typhus tendency; in those of long duration wether resulting from habit or debility.

Of the Dose, when I employ Fowlers solution I begin ~~with~~ at the Maximum with 5 or 6 drops gradually increased to 12 three times in the 24 hours – The small quantity of five drops being at first quite sufficient to produce Nausea. However I always prefer this substance used in pills after the following manner

℞ Arsenic $\frac{1}{16}$ of a grain, Opium ¼ given 2 or 3 times in the 24 hours — The Opium is an important addition to the

Arsenic and should not be omitted.

Fowlers solution however, is best adapted to Children and then the dose sh.d be small, for I have known 1 drop & even ½ a drop to produce vomiting, I will observe once more for all, that whenever Arsenic is used wether in an Intermittent Remittent or continued fever, that we should never loose sight of its nauseating effects, for to obtain its good effects that is absolutely necessary, yet it should not vomit except in the disease of Pertussis where it has been attended with the happiest effects.

Of Alum, This is best suited to intermittents of Southern climates, one disadvantage attending its use, is the circumstance of its being liable to purge, which we should studiously avoid, by combining Opium with it, its virtues are improved by an addition of Mercury — dose 5 or 6 grains — three or 4 times in the 24 hours.

We proceed now to the consideration of certain stimulating remedies which aid us greatly in our

curative means; of these the most important are perhaps Blisters & Sinapisms; the former are best adapted to the hot stage, but as we are yet considering the treatment of the intermission we must confine our observations to it at present.

Blisters are very useful but Sinapisms are more beneficial, because they are more prompt in their operation; they should be applied so as to act in full force before the coming on of the Cold stage; they must not be continued on the part applied more than 2 hours, as their action is so great that they may produce gangrene particularly in dropsical limbs.

Frictions are likewise useful remedies during the intermissions. Electricity is a very important remedy in the use of intermittents particularly those of a long standing — Dr Fowler cured a quartan of 4 months standing by it, often using

Bark and every other remedy unsuccessfully — Electricity is followed for the most part by a copious sweat which is attributed to the fear of the patient, and upon the coming on of the sweat the patient is to be put to bed & that kept up by tepid drinks &c —

Cold Bath is another remedy of considerable importance; a well regulated & vigorous diet should be allowed & generally the drink should be Porter. to this I may add that those who drink Porter are less liable to intermittents than such as use ardent Spirits.

Cathartics, these are commonly prescribed during the intermission, but may be used with much advantage during the hot stage if circumstances require them, but in the cold stage they are seldom, ~~if~~ or ever known employed — the purge usually prescribed is Calomel & Jalap, which is certainly a very excellent one, but I always use Calomel & Rhubarb.

The Podophyllum is likewise a remedy of the first importance, when a Cathartic is indicated, by it we not only obtain the purgative operation common to purgatives of this class, but there seems to exist something in it, peculiarly adapted to the cure of intermittents, and I am not the only one who has observed this, but many of our neighbouring Physicians, can attest the correctness of this remark — It may be given alone in doses of 20 grains or combined with Calomell 5 grains & 15 May apple —
Some persons have objected to the combination of Cathartics with Bark, but so far from being injurious it is in many cases absolutely necessary, Thus when there exists a constipation of the bowels attendant on the

administration of the bark, no one can doubt the propriety of joining with it a purge, and in those cases Rhubarb is preferable, besides, I hinted previously to the combination of chrystals of Tartar which has been so successfully employed by many of our practitioners — I will also observe, that I always use those combinations when I judge it improper to give the bark alone.

Emetics are remedies of the first importance, not only in intermittents, but in all kinds of Fever — more especially when there is a bilious tendency indicated by the dryness of the skin — its yellowness, bitter taste of the mouth &c — but here they are chiefly employed to cut short the recurrence of the paroxysm by being given a short time previous to the coming on of the cold stage, there is great choice in the selection

of our Emetics, and some speak highly of the Blue vitriol, but that is objectionable because its operation is for the most part confined to the stomach and does not extend to the surface, so as to produce a diaphoresis, an effect much to be desired when we use Emetics. Antimonials, are to be relied on, because they not only effectually vomit, but prove Cathartic & diaphoretic also, so that their influence is manifest throughout the whole system — of these I prefer James's powder, because by it all our intentions are obtained, though Tartar Emetic is thought by many equally as good. I agree however with Dr Thompson who says that he has put a stop to an accession of Paroxysm of an intermittent by Antimony, but has found nothing so good as Ipecacuanha,

And indeed there evidently seems something specific in this remedy.

Opium, all agree in regard to the propriety of administering this article during the intermission, and some are of opinion that when given during the cold stage, that it will lessen its violence and procure a ready solution of the disease, it is however objectionable in all states where there is a preternatural determination to the brain as in apoplectic intermittents, its narcotic effects are remarkeably counteracted by the administration of strong coffee which destroys the stupifying quality and renders it a useful medicine, when used alone it would be highly objectionable —

Of the Cold Stage, Every Tyro in Medicine will know that the chief we have to do here is to cover our patients with warm Clothing and

give him large quantities of diluents and diaphoretic drinks.

Of the hot stage – and first of the propriety of administering opium in this stage, we have already seen that we do not require it much in the intermission; and in the cold stage it is a useful remedy as well as in the intermission, if there is no determination to the brain, and especially when combined with Coffee, but in the hot stage, all the Physicians in America depricate its use, finding it improper and at best a precarious remedy. Dr De Haen observes with respect to this article, "That when given in this stage it increases delirium, produces stupor, & gives rise to disagreeable & unrefreshing sleep." but in opposition to the testimony of this Gentleman is the experiments of Dr. Lind

who says, "That he prescribed this Medicine with the happiest effects in all states of intermit-tents fever, that when given in the cold stage, it lessened its violence & shortened its dura-tion, that when given in the hot stage, it caused a universal sweat, lessened delirium, relieved the head ache, produced an agreeable soft and refreshing sleep" — this piece of diffe-rence between these two great Physicians may probably be reconciled, when we consider the difference of the climate in which they lived. De Hoen in Vienna, and Lind in India; I however concur in opinion with De Hoen, and consider it when prescribed alone, very improper Medicine in the hot stage of an Intermittent, and I never use it in such cases with any other view than its diaphoretic quality and always take care to combine some Medicine of this class with it such as Tartar

Emetic - Ipecac, &c -

Of Tonics in the hot stage, I have before observed that bark is an improper Medicine here, and I will now add that all the Tonics wether bitters or astringents are equally so; and particularly the aromatics such as Serpentaria are highly prejudicial for to use the phrase of Dr. Senac it is adding fewel to the fire. Arsenic may be employed here with advantage, The Physicians of Delaware generally do it and their practice is attended with much success. Sacharum Saturni. This Medicine in the hight of the hot stage, when depleting remedies are especially required, Physicians of Europe have employed with the happiest effects, it is certainly an important and valuable article, but it is at the same time dangerous, & should not be used untill every thing else had failed. -

The Maximum dose is 3 grains thrice in 24 hours and it is necessary to combine a small portion of Opium with it.

Our principal treatment of this stage must be with Nauseating Medicines and of these I have found none so effectual as Dovers Powders; it is a Medicine of the highest utility and has passed my most sanguine expectations — I always use it, though the Physicians of Europe always makes use of James's Powders — prescribing it in doses of 8 grains every 3 hours — I will observe here for the benefit of the Gent.ⁿ of the Army, that Dr — in Canada found intermittents most successfully treated by the combination of Opium & Sal. ammonia —

Of Blood letting in the cure of Intermittents I have never trusted to V. S. alone in an

intermittents of any form, but it is an excellent remedy, used in the hot stage when the pulse is full strong and accompanied with delirium dry skin and tongue – It is probably next to nauseating medicines, it is the most effecacious means of conducting the patient properly through the hot stage, and is more especially indicated when the intermittent is accompanied with some topical phlegmasia. In prescribing it particular attention should be paid to the age, strength, constitution, place of residence &c – of the patient, wether town or Country as also the nature of the prevailing epidemic, upon the whole it is a valuable remedy when judiciously ap – plied, but I am confident from its promiscuous employment throughout

the U. States it has produced much mischief

Of Anomalous Intermittents.

This complaint often assumes the form of many other diseases, of which it is our duty at present to treat, and first of Dysentery. This for the most part is of the Tertian type, and is known by the patient being affected with Chills, hot fit, discharge from ~~the~~ and griping of the bowels to day, when tomorrow those symptoms entirely disappear and come on again the next day, the intermission should be treated by bark, and other remedies recommended during the Apyrexia of intermittents, and the Dysentery which appears is to be treated by remedies suited to that disease, which will be mentioned hereafter—

Cholera Morbus = Intermittents sometimes take on this form of disease, the patient seized with vomiting and purging to day of bilious matter similar to genuine Cholera and tomorrow there will be an absence of those symptoms, when they will appear again on the third, the treatment should be bark & in the intervals, and opium & other remedies suited to Cholera on the day of attack.

Tertian Colic, the patient here is affected with Colick pains every other day as in the course of a tertian intermittent; the remedies should be bark in the intermission and Medicines suited to Cholick in ordinary should be given on the attack.

Rheumatism, The patient here is attacked with chills, fevers, and violent and distressing Rheumatic pains to day, to morrow

there will be an absence of those symptoms, but they will return again on the next day, observing in general a tertian form — The cure is, bark, Arsenic &c. in the intermission and moderate bleeding, Antimonial &c during the paroxysm —

Gout, Some have thought that intermittents have assumed the form of this disease but I do not believe it.

Hemicrania — This I think is a form of Intermittents, arising as I have ~~been informed~~ observed from the same causes viz Miasma in persons of the same family, at the same time affected with intermittents, though I do not mean to say that it does not originate from other causes, for Gout often appears thus disguised, and I have told you above, that worms had produced it;

in this instance it is for the most part of the tertian & quotidian types, the remedies are those of common intermittents during the intermission and such as are suited to genuine hemeerania when it appears, the Medicines should be active as bark arsenic &c – Serpentaria, Valerian and large doses of Laudanum previous to the cold stage.

Pneumonia. many instances of this kind of intermittents has occurred in the U States viz – at Bristol where this disease ~~to~~ appeared under this form and was treated by the Physicians of that place as a genuine Pneumonia all of which patients died – but as soon as it occurred to them, that this might be an insidious intermittent they varied their remedies, as they might be

suited to common intermittents thereby curing most of their patients — in the paroxysm we should ~~use~~ rely on very moderate Vgs, as this disease in the U. States is very apt to run into Typhus, and the proper application of blisters during the paroxysm with bark &c during the intermission.

Dropsies, of different kinds — This is particularly of the tertian type, to day the patient will be affected with abdominal swellings and also other parts may be swelled, to morrow an absence of those phenomena, when on the subsequent day the same appearances take place — We have here to trust to the administration of the Cortex Peruvianus which medicine I have found more successfull in preventing dropsical effusion, when early administered, than Arsenic or any other medicines.

Hydrocephalus Internus, I have seen a strongly marked case of this kind in a Negro Girl in my brothers family, having paroxysms and intermissions of this disease similar to those appearing in common intermittents, and I am persuaded that it is a form of intermittent much more common in the U. States than has been generally supposed. It is to be cured by the use of Bark only during the intermission — which is to be used only during the complete Apyrexia.

Scorbutics — When we have an intermittent of this type, our remedies are vegetable diet and acid drink — Elixr. vitriol, bark Dry Clothing &c ——

Asthma — I have seen a case of this kind in my own Wife, who was for several days troubled with Asthmatic Symptoms, and was not benefited by any remedy proposed, untill it was discovered to be a disguised Intermittent — The Bark was then given during each intermission and the disease was thereby cured —

Apoplexy — This Gentlemen, is the most dangerous and dreadful form under which Intermittents appear, and I am happy to inform you, that when timely attention is paid to it, its fatal termination may be readily ~~terminated~~ prevented, it is of a Tertian type and is always fatal at about the 2nd paroxysm; consequently we should make use

of our most potent remedies, during the first intermission, and there is none that I can equal to the Cortex Cinchona; Arsenic I have never tried; Nor ever will I, The patient is first affected with chills, then a composed state, which terminates in a complete apoplexy — The next day wether bleeding be used or not, there is a complete absence of the symptoms, when ever the B.d there is a return of the dreadful disease, which terminates fatally — The cure as I before observed is bark in the intermission. Tetanus is not uncommon; the succession of symptoms appear as in tetanus and the paroxysms and intermissions observe the form of an Intermittent. The cure is remedies during the attach suited to

Tetanus, and then suited to intermittents during the Apyrexical stage as Bark &c —

Hydrophobia — This is no less true than remarkable and Mr Dunnas has given us an account of this deceitful appearance of intermittent which was accordingly cured by the use of Bark during the recess of the paroxysm —

In short Gentlemen, I may conclude by informing you, that Intermittents may be an epitome of every disease to which the Human System is liable with the exception of the exanthematum, or eruptive fevers —

Of Remittent Fever's.

These bear so great an analogy to Intermittents, that I have the opinion, that they are especially the same disease, and not by any means generally different, as some have supposed; because they are from the same cause viz Marsh Miama and the Remittent not only passes into the intermittent, but likewise intermittent into remittent, consequently what I have said above relative to the treatment of intermittent, relates also to Remittents.

Of Continued Fever's.

This is a fever without intermission not produced by marsh miasmata, but with remissions and exacerbations, though not

always considerable; continuing & having two paroxysms each day - Dr Cullen says those only are to be considered as strictly continued that have their origin from human effluvia, or other causes than marsh Miasma and are marked by being made up of 2 paroxysms & remissions in the 24 hours; This arrangement however is evidently erroneous for he places Yellow fever & Typhus in this genus of fever, both of which are known to have their origin from marsh Miasma; not unfrequently in fact yellow fever always originates from Miasma of this kind - and Dr Curry has shewn that typhus sometimes has its origin from this cause. Under this head I shall only consider Yellow fever & Typhus and 1st of Yellow Fever

Of Yellow Fever, or Typhus Icterodes.

From the many phenomena of this disease I refer you to Dr. Linnings account of it, as it appeared in Charleston which I consider to be the best that has ever appeared; though Dr Rush's history of the same fever as it appeared in 93 is the most sysematic that has been put forth from his pen, and deserves your most attentive perusal.

Dr Lining has observed that persons who have once had this disease are not at all liable to a relapse or to be again affected by it; but he has gone rather too far, the system however often having been under the impression is not liable to be again influenced by it for several years. The Dr. has again observed that the

blacks are less susceptible than the whites, or rather escape entirely the epedemic, while it rages with unrestrained violence among the white inhabitants. I believe this remark is for the most part correct, for upon a just computation in this City 50 whites would be attacked when only one black would be affected & 6 whites would die to only one black.

Hæmorrhagy takes place from blistered surfaces as well as other parts, taken notice of by authors, & Dr Lining who has observed this phenomena to take place even from the unabraded surface of the Cuticle — Besides other symptoms which have been recorded by authors in this disease — there is one which I several times observed in this City which was always the precurson of fatality. This was a peculiar pleasing kind of

of delirium which induced the patient to hide his face under the bed clothes like a playful child would hide from its mother, accompanied fre-quently with subsultus tendinum and the most pleasing & smiling countenance.

Of the Prognosis of Yellow fever.

And 1st. of the favourable appearances — viz 1st. a calm state of the stomach, though to this there are exceptions, for many have recovered whose stomachs have been much deranged and others again died who did not manifest the least uneasiness in that viscera — but which was commonly found on dissection to be surcharged with a large quantity of the black matter so com-mon in the present fever.

2nd. When Vomiting does take place, the matter

discharged being of a bilious nature, this is probably the most favourable symptom which occurs for I do not recollect to have seen, or known a single patient die who have thrown off this kind of matter.

3d. An early and spontaneous diarrhoea or easy and gentle evacuations.

4th. a long continued and universal sweat in the first stages.

5th. a large Urinary discharge, though I am somewhat doubtfull of this.

6th a spontaneous Salivation or ..... of Rush

7th Sternutation – 8th a clear white tongue and scabby eruptions about the mouth.

9th. Little anxieties precordice.

10th – little or no inflammation of the eye or intolerance of light.

11th. a firm and steady mind.

12th. Moderate hæmorrhages in the commencement particularly from the Uterus and Nose.

<u>of the unfavourable appearances.</u>

1st. an early deranged state of the Stomach.

2nd. vomiting of Mucus mixed with blood.

3d. The fatal black vomit, which was always more fatal in Adults than in Children, I have known but one single recovery from it.

4th Obstinate Costiveness.

5th Great heat in the Stomach and uneasiness from pressing on that organ.

6th Anxiety about the præcordia.

7th Jactation — 8th long continued dry skin.

9th Petechial Spots — 10th much inflammation of the eyes & great intolerance of light.

11th depressing passions of the mind such as timidity — 12th Rapid passage from the

~~intermediate~~ first to the second stage of Fever.

13th. Haemorhagy in the second stage particular-
-ly from the Stomach

14th. Dry black tongue and delirium.

15th. great and pressing thirst towards the end of the disease, which is one of the most unfavourable symptoms, and is particularly remarked by Dr Rush as being so. — As yet, we have said nothing of the yellowness of the skin which has been thought to arise from one of ~~the~~ two causes. — 1st. From the absorption of bile this was Dr. Rush's opinion — and 2ndly from dissolution of the blood. — I have always thought that the yellowness and bitterness of bile inseperable from each other, but in all my attempts to discover the bitter principle of bile in persons labouring under this disease,

I have never been able once to detect it or any thing else than the usual alkalescence of the serum, besides the yellow colour of the skin does not always appear in the early stages of the disorder, for I have seen it in the last efforts of expiring life, extensively diffused throughout the surface of the whole body, so that it would be supposing too great a power in the absorbent system, to imagine that the bile could be thus suddenly taken into the circulation & determined to the skin, so as so as to impart to it the colour of which we are now speaking, but I have another objection to offer in opposition to this idea, which is, that the yellow colour of the skin uniformly follows the bite of a serpent whose fangs are poisonous, and none probably would contend that the yellow colour in this instance

depended upon the absorption of bile, yet I leave it to your own determinations, and should be happy to see an investigation into the causes of this yellowness & the difference, if there be any, between that arising from fever and that from the bite of serpents.

The next question to be considered, wether this is a fever Sui generis or not, the advocates for the former opinion say, that it is designated by phenomena no where to be met with in other diseases, thus the inflamed colour of the eye they consider as pathognomic and in truth it does occur in 98 of a hundred cases; but I have seen this state of the eye in the hot stage of the remittent & intermittent fevers as often as I have ever seen it in the yellow fever. again they assert that the black vomiting is

is another characteristic of this disease, and not to be met with in other affections of the System, but a Surgeon informed me that the black vomit has to his certain knowledge arisen from a compound fracture in as sensible a degree as it has ever appeared in this fever. Lastly they plead its mortality, but in Harrisburg a malignant fever raged, which carried off more bulk for bulk, population for population than the yellow fever did in this City, therefore I see no reason, Gentlemen to consider this disease any other than a Mortification or different grade of our common bilious fever as Dr. Rush seems so clearly to have established.

Of the length of time the Poison may lie dormant in the System.

I have never known the phenomena of yellow fever appear the same day after the person

was exposed to infection, though it is probable that when the Miasma is extremely concentrated this early appearance of the disease may take place; yet we may receive it as an axiom, that the poison will remain at least 5 or 6 days in the System without manifesting itself. — It is however in my opinion an extremely common circumstance for it to lie dormant for 8 days before being brought into action, this fact is exemplified in Strangers who visited the City & remained here same length of time according as their respective business detained them, when the fever did not appear within the above specified time, often having been exposed to the Measma. A very remarkable case occurred to me, of a lady of Philadelphia, who hearing of the prevalence of this fatal epidemic retired

to Germantown, but nevertheless was affected in 21 days after leaving the City, with the black vomit — and in some rare cases 28 days have transpired before the patient exhibited the phenomena of the fever, so we may conclude that the infectious matter may remain in the system generally from 8 to 20 days before the system is affected with the disease, It is a fact worthy of remark and one which I am unable to explain that the fever, like typhus, is much more apt to appear in froth and cool air than in warm situations, this fact we found illustrated strongly in the year 93, among the nurses who attended the Sick.

Of the remote Causes.

When the Epidemic first made its appearance in this City, it was universally believed by the

medical faculty here, that it was imported from the West Indies, with the exception of Dr Rush and the french physicians, who attributed its origin to domestic causes, only differing as to respected the peculiar substance of the effluvia – Dr Rush referring it particularly to putrid Coffee, the french physicians to a contaminated state of the atmosphere in general. The question is not decidedly settled, though the illustrious professor had the satisfaction of seeing before his death, that not more than 5 or 6 Medical Gentlemen in the City dissented from him in assigning the cause to domestic origin, which is now my decided opinion, though I was at first an enthusiastic opinion, though I was at first an enthusiastic supporter of its being imported; I am however far from being of the opinion that it cannot

be imported, not that persons can bring the infection with them, for I do not consider it contagious, but that it may be brought in the foul holds of ships, and consequently think that it is indispensibly necessary to perform quarantine. It is an easy matter to shew that the causes of this fever are domestic, the indians in diff.t parts of America were carried off by malignant Epidemics, which from certain circumstances I am confident, was the bilious yellow fever, The Aborigines in the vicinity of Mexico were carried off by pestilential complaints which have been called by authors the plague, though I expect they were exactly similar to the disease now under consideration, and in Massachusetts the Indians were swept away with a like complaint, as we may easily infer from their seiging

hold of the yellow garments of the whites in taken of the appearance of the disease which carried off their ancestors.

Dr Rush attributed the remote cause entirely to the effluvia from putrid Coffee, but I cannot entirely be of this opinion, for the fever was raging in other parts of the town remote from that in which the Coffee was laying, before it appeared there, besides I am not disposed to believe that putrid Coffee is so violent a miasma as has been imagined, for I have been credibly informed that in Surinam, in Samaria a disease has been prevalent resembling in a great measure the Elephantiasis which was cured chiefly by enveloping the patient up to the neck with Coffee, thus putrified without its being productive of Malignant fevers or any other bad consequence, however all putrid vegetable substances are to be properly considered as the chief cause of this

disease, many of which are enumerated by Dr Rush, as putrid Hemp, flax, tobacco, &c — though with respect to animal substances there is great contrariety of opinion; yet this fever has certainly appeared in Mexico, and could be attributed to no other cause than that of large quantities of locusts heaped in ditches were it was found to prevail in a greater degree than in places at farther distance — When I mention'd this circumstance to Dr. Priestly he could reconcile the idea upon the principle that locust being of a mixed nature might cause the disease, but brought forward this argument, that in the plagues which rage among the Tartars, the inhabitants always expose their dead bodies to the atmosphere without any disagreeable consequences resulting, which circumstance I do not conceive to be satisfactory.

Wether this fever be contagious or not, Dr Rush was of the opinion that in the year 93 but afterwards changed it, & I have never seen a single fact which would induce me to believe that it was, for persons have been brought into the Hospital with this disease without its spreading, it has been carried to the Jail without its ~~spreading~~ communicating, it has also been carried into the Country without ever having been communicated to others, which circumstances completely decide me in opinion I have given.

Of the Cure.

When the fever first appeared in this City it was thought to be of the same nature with what was called the putrid fever and accordingly Tonics & Anticeptics were extensively employed, such as Barks, Wine, the Mineral Acids, particularly the Sulphuric; but they were shortly laid aside as being of no kind

of utility and rather a disadvantage, as to the Cortex besides what Dr Rush & Stephens say to the impropriety, I can positively assure you, that in the numerous instances, in which I had occasion to see it employed, I did not find it productive of the least good effects to my patients, and in many cases injurious; we are not to infer from this however, that it is suited to no case & climate, for the Spanish Physician will convince us that it has been an important remedy with them, being given in quantities, though far larger than could be administered here. The British Physicians speak of it also, as being the only remedy by which they could get the better of the disease in the West Indies, from which circumstance we may infer that the Bark is best adapted to this fever in hot Climates.

The Elixir of Vitriol was laid aside not only

from the change of opinion respecting the nature of the disease, but on account of its having been found always disagreeable to the stomach; It has however been a successful remedy in the hands of some, & Dr. Dover especially informs us that besides the evacuations of bleeding & purging, which he always had recourse to, in the yellow fever, he always found the vitriolic acid diluted a powerful auxiliary in conducting his patients safely through the disease. Physicians finding their plan of treatment inefficacious, resorted to other means, and among the first was that of Bleeding, the honour of introducing which was Dr Barnwell who has since gone to New Orleans; in proof of which I now have documents to shew. The practice was afterwards followed by Dr Rush — By many able Physicians large quantities of blood were taken, whereas on the other

hand, particularly by the French physicians blood letting was prescribed but sparingly; the promiscuous use of large blood letting was no doubt the cause of the death of many, because it was used in all stages of the disease without regard to the pulse or advice from physicians, but again, when employed on the first days of the disease it has saved many from the grave. My practice which I am sorry to say was by no means successful, was of intermediate grade between the two methods, but I bled much more liberally towards the first of September.

Purging, a very constant attendant on this disease was a violent constipated state of the bowels; and fortunately all the practitioners agree as relates to the propriety of purging except in a single instance, where a tonic plan was

adopted, a publication appeared reprobating this method and substituting in its stead mild Enemas, some made use of very active Cathartics as Cal-omel & Jalap, Rhubarb, Gamboge &c — while others were content with Oil, Tamarinds &c — the common with Dr Rush's — 10 & 10 which certainly did much harm, from its indiscriminate and injudicious employment, while on the other hand it was productive of much general good when properly prescribed, though I generally used milder purges — The benefits of Purging upon the whole, have been very accurately detailed by Dr. Rush — The following advantages he particularizes — viz

1st — That it raised the pulse when depressed & lowered it when preternaturally excited.

2nd In place of weakening the system it imparted strength to the patients, this was not always the case, for many fainted and others died after a

a profuse evacuation while sitting on the close stool—

3d It lessened the subsequent paroxysm when given over night.

4th Produced sweat — 5th prevented or lessened the tendency to vomit.

6th Removed obstructions of the Symphatics and yellowness of the skin, about the causes of which Dr Rush and myself differ, as I before informed you,

The American Physicians advocated cathartics of the most active kind while the french were fond only of the milder sort, My opinion is, that the former did too much in this way, & the latter not enough— consequently I took an Intermediate course.

Sudorifics, are important remedies in this disease, & were certainly too much Neglected by Dr Rush from his extreme partiality to bleeding & purging— I have used Dover's powders

with considerable advantage, but Tartarized Anti
mony is far preferable; I have never employed
James's powders - but the British Physicians speak
highly of it in this disease as a Sudorific;
The Eupatorians has likewise been commended,
Cold Water applied in the hot stage of the fever was
found a very important auxiliary: It was em
-ployed with two views, first to absorb heat and
secondly to promote diaphoresis, and I un
questionably found it a more effectual Sudo
-rific than any other medicine of that class
which I employed, it not only relieved heat and
delirium, but it likewise aided powerfully the
operation of Cathartics, and was followed by a
pleasant and refreshing sleep, a fact well attested
in my own case, when I was attended by a few
Negroes who occasionally poured buckets of
cold Water on me, when sweat broke out, the

the application of the water was dismissed and the patient covered up, taking some tepid drink to promote a determination to the skin. Cool air, was indispensable and during the fever light vegetable diet; but I am far from believing with Dr Rush that such a diet was calculated to prevent the disease, because a close adherence to the common manner of living was found the best preventative and such as I would always recommend. Blisters, were used during the first stadium upon the principal of revulsion, and during the 2nd upon the stimulating quality of them acid in both stages they were found of eminent advantage — In the first applied to the abdomen, as in Ileus they favoured the operation of Cathartics, & applied to the region of the Stomach they were the surest

means of stopping vomiting — in the second stage they imparted energy to the system, and when employed as before on the Stomach or Abdomen they hindered a tendency to gangrene in the intestines, when applied to the head they relieved delirium.

Emetics, are universally rejected not only by the Physicians of America but every other climate, though they were at one time strongly recommended by Dr Rush — Dr Hillary rejects them in toto — and Dr Mosely does not admit even the mildest of this class of Medicines. — I agree with Dr Rush however in the impropriety of using Opium in this disease, he has justly remarked that it has always increased the heat of the skin, costiveness & irritability of the Stomach, it was never

productive of refreshing sleep, but always gives rise to frightful dreams and the horrors of the grave yard, it acts specifically, in my opinion, in this disease on the liver and much to the disadvantage of the healthy action of this viscus, and in short I concur with Doctor Mosely in considering it a fatal medicine in this dreadful disease Dr Rush, nevertheless has thought it useful when applied to the region of the stomach in checking vomiting, There is no symptom, from which so much danger is to be apprehended as the black vomit, and accordingly many remedies have been prescribed for its relief; of these the most important are Magnesia, lime water, Ether and strong Coffee —
Lime water and milk in the dose of a

table spoonfull every hour, not only arrested the tendency to the formation of this matter, but also relieved the vomiting when it appeared, and in one case (a Negroe) to whom I prescribed this medicine, there was a complete recovery from the black vomiting, the only case that I have ever seen cured, she however used the lime prepared with hot water, which equalled the strength of the common white wash, in the same dose I ordered the common lime water to be administered, so that in each ounce of this medicine, she took no less than 100 grs. of lime — whereas if the water had been used as it is commonly made, there would not have been more than 2 or 3 grains to the ounce — The French Physicians em

ployed the Magnesia with the same view and with the best effects; the quantity given was very great — I employed a weak infusion of Mustard with great advantage; It is employed by adding a tea spoonfull of hot water, which is not to be used untill the Mustard is deposited. Æther was used by many with considerable utility and I employed it with evident good effects, before I saw it so strongly recommended by Dr. Chisholm who always preferred it to any other Medicine, in the dose of 1 table spoonfull of vitriolic Æther to a suitable quantity of Cold water to relieve this dreadfull symptom; he alledges that it relieves the irritability of the stomach and prepared

it better ~~thaqe~~ for the reception of the Bark

Among many other remedies that of Sac. Sat has been employed by Dr Irvine, as he himself informs us, with the effects of relieving the black vomito, when every thing else had failed, and from the analogy ~~of~~ between this discharge from the stomach & hemorrhagies, I judge it may be an important remedy, and I am sorry I ~~and~~ have never tried it.

Hitherto we have said nothing respecting Mercury in the cure of yellow fever — It is by no means a new remedy, for it has been employed long since ~~by~~ in Malignant fevers, but was never used so largely as in 93, when it was employed chiefly as a remedy with a view to its

purgative operation, untill it was observed, that when it accidently affected the mouth it was productive of the most salutary effects to the patients, Dr Chisholm was of opinion that when it thus affected the system it was almost an infallible remedy in the disease and never treated it in his practice without employing this Lampson of the Materia Medica so as to produce a Salivation, and consequently he is entitled to all the honor of discovering; After his publication became generally known in the City, all the Physicians had recourse to this Medicine, and considered it as a sovereign remedy, when Ptyalism was the consequence of its administration and all felt the utmost ~~confidence~~ confidence upon observing these effects, that their patients were completely relieved or rescued from danger

and I can safely affirm that in all the instances in which I saw Salivation produced in the year 93 by the agency of Mercury, that not one single one died, and I am sorry to add that many cases occurred in the Pennsylvania Hospital in the year 93, in which Mercury employed, so as to excite Salivation failed in curing the patients, but in the great majority of Patients in which it was there used it proved to be an invaluable remedy.

Of Typhus Fever. ☞ see over leaf

Typhus is precisely of the same nature as the putrid, Nervous, Jail, Hospital, Spotted, or the Camp Fever; Dr Cullen holds it as a genus, and describes it in the following manner, Heat of the Skin not very great rarely exceeding much

the temperature of the body, pulse small weak & frequent, intellectual functions are impaired, and though delirium occurs it is not of a furious kind; the Urine is for the most part unchanged yet the strength of the system is greatly prostrated. of this genus, Professor Cullen has 2 species viz Typhus Mitior & Gravior, and for the various phenomena I refer to Thomas and Wilson.

I shall consider both of these under one head because they are only grades of the same disease but my observations will apply more particularly to Typhus

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☞ Contagious, heat little increased pulse weak small and quick, Urine little charged, Animal functions disturbed prostration of strength. (Cullen)

Synochus he defines thus: Contagious, at first Synocha and then Typhus.

to Typhus gravior — Dr Hucham has given us a very good account of the Mition under the title of Febris lenta Nervosa which occurs in the most cleanly families and commonly lasts 20 days his work is worthy of your attentive perusal, Typhus makes its attack sometimes very slowly so as not to prevent the patient from attending to his usual business and is attended with Vertigo which resembles in some degree a slight intoxication, whereas in others it is as immediate, almost, as an appoplectic fit.

The duration of this fever is exceedingly various lasting in some cases no longer than 48 hours and some state only 24, it most commonly exists 6 or 7 days or 2 weeks and sometimes 6 or 7 weeks, the shortest duration of Typhus that I have ever seen was 48 hours, though it is probable the patient may have been complaining in some

slight degree before his sensible and sudden attack
The symptoms most frequently observed in Typhus
are, vomiting sometimes, Nausea, loss of appe
-tite, debility, vertigo, heaviness and sometimes
pain in the head, unrefreshing sleep, pale
face, and skin sunken extremities Tinnitus Au
-rium, Musinner of the head or Vertiginosus
of Darwin – dull pain of the Temples &
eyes – which are turged and pervaded with
a chronic inflammation, very different
from the acute kind pervading yellow fever –
the face is sometimes bloated & livid, the temples
throb when the pulse is small, blood drawn is
somewhat sizy, the strength and spirits are
depressed, sighs, dyspnoea, voice slow, eyes half
closed in sleep – pain in stomach, tremors,
subsultus tendinum, stupidity, a vomiting
of bile, and even of the matter of black vomit
sometimes occurs, the tongue is either white,

furred and dry or moist, and is often of the colour of red cloth.

Of the Prognosis

There is no disease in which prognostics are more uncertain than this, those however which have been considered favourable, are the following, Moderate diarrhoea more especially when it is rather bilious, moderate diaphoresis, particularly in the protracted stage, turbid urine, moist tongue and skin, spontaneous salivation, abscesses of the parotid gland & in the axella in the last stage, a white miliary eruption, scabby eruptions about the mouth, deafness the most favourable of all symptoms, patches turning from the livid to a brighter red colour, and lastly the pulse raising and the head becoming relieved upon the use of urine and other stimuli.

The unfavourable, are, violent diarrhoea particularly when attended with a hard swelled

belly, profuse sweatings, hemorrhagies from different parts, black patechia, Gangrene where blisters have been ~~employed~~ applied, inflamed and staring eye, acute hearing, subsultus tendinum, frequent picking of the bed Clothes, dark sordes about the teeth & gums, black aphthous tongue, dark coloured & bloody urine, and a disposition to throw off the bed clothes, extremely desperate; But I will observe again that notwithstanding the most dreadfull appearances, when the pulse is imperceptible at the wrist or nearly so, it is remarkable that even under these circumstances patients have recovered and consequently we should never desert them untill they are absolutely dead.

Of the Predisposing causes. a weak and a relaxed Constitution particularly such as has been depilitated by frequent attacks

of the same disease, debility produced by an Intermittent however legitimate its shape, violent depressing passions such as grief, terror, fear and solicitude, some say, hot climates, but I am of opinion cold climates are best suited to predispose to this disease.

Of the remote and exciting causes.

The first of these which I shall mention is Marsh Miasma, which has been incontestibly proven by Dr Currie of Liverpool, though Dr Cullen strongly contended that human effluvia was the only or principal cause, and I myself have seen the disease arise evidently from this cause because its prevalence could be traced to no other source; Fish of all kinds in a state of putrefaction, this fact is illustrated from a Crew of a Danish vessel being attacked by a spotted fever that was found to arise evidently from putrid cod fish, upon the removal of which

(which was accomplished by removing to Copenhagen from whence the vessel set out) and obtaining a fresh crew the disease entirely disappeared; Water in a state of putrefaction, bold applied to the body when warm, a case of this kind I have seen strongly marked in a Cook who after being much heated and exposed herself suddenly to cool air, was attacked with genuine Typhus fever and died in 21 days after the commencement of the disease, some authors have asserted that the taking in of a large quantity of animal food without any vegetables or any other antiseptic articles render persons peculiarly liable to be affected by this fever, here I differ ~~from~~ with them essentially, for I am of opinion that paucity of food is by far the most common cause. Fear and Terror though placed among the remote are legitimately

occasional causes, of this Dr Duncan gives us a remarkable instance of a boy who was amusing himself in a field when a thunder storm came on which so terrified him that he was seized with complete typhus and died in 15 days afterwards, But the most frequent cause is contagion, and in support of this so many facts have fallen within my knowledge as not to have the smallest doubt in my mind of the truth of this assertion — I attended a boy in this City affected with this fever, when it was no where prevalent in any other part of the town, but in a short time after his illness, many of his attendants and friends who visited him, where attacked similarly, so that it was propagated from one family to another untill it prevailed in several parts of the neighbour hood; and what is farther in proof of the contageous nature

of the disease, two of his relatives from Morristown visited him and upon their return home died with genuine Typhus, those being the only persons in that place affected with the fever. Cicliomiasma is no doubt a frequent cause of Typhus and in my opinion it has been very correctly supposed by Dr Rush that the complaint can be propagated by other animals than the human species, the Professor himself has informed us that it was rendered prevalent in some part of the state of New York by Cattle, and Dionysius of Hallicarnatus has given us an account of a pestilential disorder which depopulated Rome and which was carried to the Country and every where prevailed from the contagion being diffused by Sheep.

Of the Cure.

In order properly to treat this disease, it is necessary that we should be acquainted with the 3 stages or forms under which it appears, and adapt our remedies accordingly —
The 1st — is when the patient feels a slight indisposition but not so great as to confine him 2nd when so unwell as to be confined, there existing at the same time some degree of fever, pulse full, vertigo &c — and 3d when the illness is so great that the pulse sinks, stupor, prostration of strength, and other formidable symptoms make their appearance.

Of the Remedies adapted to the first stage, a primary and important step in this and in every other stage, is to supply the room of the patient with fresh air and when it makes its appearance in Camps Hospitals &c — the

the removal of the affected person from the cor-
-rupted place is absolutely necessary, and so
much did Sir John Pringle think of this pre-
-caution, that he observes, that many were
cured by the use of Serpentaria and other Sti-
-mulants yet they were always furnished
with pure air in as great a degree as cir-
-cumstances would permit.

Emetics in this stage are considered important
remedies, and were distinctly marked as such
by Pringle, but in employing this class of Me-
-dicines we should always have an eye
to the selection of our Emetics, Dr Duncan
always preferred Ipecac: and Fordyce, Tarta-
-rized Antimony, of the two I give my prefer-
-ence to the former - not only from the uniform
prejudice in favour of it, but on account
of its use in Intermittents, though the

Analogy between the two diseases being not very great, it is a much more manageable medicine than the former and not so apto to be followed by a violent state of debility. It is not always absolutely necessary to use this remedy in this stage so as to puke, for often a Nausea occasioned by it will be found to answer our purpose, and in many cases last spring, treated the disease in this manner in the first stage; those cases were chiefly Typhus Pneumonia, it is however in general impossible for us to strangle the disease in the commencement by this or any other Medicines, for it will for the most part run its course, and though we may not enjoy the satisfaction of seeing it thus cut off, the effects of nature will undoubtedly be greatly assisted.

Cathartics, are like Emetics very necessary agents

in assisting us in the cure of this disease, they should always be of the milder kind, for besides B.f. nothing is more certainly dangerous than active Cathartics. The best purges here, besides Emetics for they often act in this manner with the most advantageous effect, are Castor Oil taken in some stimulating vehicle as Cinnamon Water, Rhubarb alone or combined with a small quantity of Calomel about gr. ij –

Salivation is likewise an important remedy in this stage of the disease, and I am of opinion that we cannot commence the Mercurial irritation too soon; and the form of medicine I would prefer in this case would be the blue pill given 2a day, each pill containing one grain of Mercury. The Nausea attendant on this fever does not always require the use of an Emetic to relieve it,

it, for it may be carried off by those remedies which are mentioned as being necessary to remove the uneasiness of the stomach accompanying yellow fever - and among these, I think, there is none more preferable than the weak infusion of Mustard, for if it be strong it will puke.

Of the treatment of the 2nd. Stadium.

In this stage, as I before observed the pulse is full and sometimes so great as to require phlebotomy, though in prescribing this, we sh.d be extremely cautious, for if the bleeding be large, even in the most robust habits, the pulse will sometimes sink never to rise, & if it be not followed by that consequence it will give rise to delirium, when it did not exist before, & increase it when present. This I found to be the case last year, consequently it requires great nicety even if complicated with pains in the Chest, and in

the case of the Gentleman who died 48 hours after his attack – I ordered a small quantity of blood to be taken, in consequence of his complaining of uneasiness in his Chest, which may probably have hurried him to his grave, though it was one of those cases which could not have been checked by the interference of our art.

When I was in Edinburgh Dr. Home was in the habit of bleeding his patients in this form of the disease, and was very successfull in his practice, though this method is now entirely rejected; We see then it is a precarious remedy and when prescribed it should be done with a sparing hand and taken in small quantities, at most one bleeding is sufficient.

Emetics are equally necessary in the second stadium as the first and are found, for the most part, effectual remedies for relieving the head ache &

Nausea which prevail, Ipecac: is likewise here to be given so as to operate mildly, producing a moderate vomiting & if the operation be attended with purging in a slight degree & a moderate diaphoresis the validity of the Medicines is improved.

Of the third Stadium. This commonly comes on in 3 or 4 days after the formation of the fever & sometimes later according as the patient has been treated in the first stage of the disease, for Pringle has very justly remarked that if the depleting plan be carried too far in the first stage of the disease, particularly bleeding, the patient will be precipitated from the first to the last stage & consequently unhappily escape the 2nd. — It is here that the aid of the Physician is eminently required and we ~~have~~ are to have recourse for the first time to Cordials —

Among the articles employed there is none more

more important than opium, which is not given with a view to its stimulant effects, for they are comparatively small in regard to the other substances, it is administered chiefly to tranquelize and calm the disturbed state of the system and to procure easy & refreshing sleep so much required in this disease; it may be given once every 3 or 4 hours in the course of the day and principally in a solid form, and at night it is indispensible for the reasons assigned above.

The Volatile Alkali, as a stimulant is a favourite remedy with me, and may be given in the form of bolus if there be a tendency to vomit, but if that be not the case I always prefer the Alkaline Julep made in the following manner, ℞ of the concrete volatile Alkali ʒj rub down with ℥ij of Sugar to which add of Comn. Water ℥ viij & ℥j of cinnamon

mamon water, of which give rather more than a table spoonfull of it, every 2 hours, so that the quantity given may be 5 gr.ns a dose and upwards of 60 gr.ns every 24 hours, for we can rarely do with less than that of the alkali in 24 hours in this low state of fever, while a less quantity would do in the febris lenta Nervosa, by means of this medicine thus administered I have found a less quantity of Opium required to answer the intention for which it was given.

Serpentaria, this is a very important remedy and was employed with the happiest effects by Pringle; he gave it sometimes in substance in the dose of from ʒij to ʒj in the 24 hours and frequently used it in decoction with Cinchona; when the powder is given the dose is commonly about 5 grs. every 2 hours, but the decoction is mostly used. The British physicians have

administered this with great advantage in Typhus Pneumonica, and in those sweeping intermittents of America, it was much employed particularly in Bristol by Dr De Monnally who always used it in such quantities as to promote diaphoresis.

The Angustura from its pungent and stimulent nature is preferable to Cinchona in this disease, & like it may be given in substance or infusion and on account of the great analogy between this & Magnolia I recommend the latter article to your particular notice.

Cascarilla. is by no means a trifling remedy in Typhus; on the contrary in the Typhus intermittents which prevailed in Adgerstown and other places, it was the chief remedy relied on & always succeeded in effecting a cure when the bark failed.

Camphor, this has long since been spoken of as a useful medicine in the disease under consideration — Haller informs us that he administered it very successfully in putrid fever and confluent small pox, and Sir John Pringle speaks highly of its efficacy combined with contrayerva — Dr Darwin used it in the same disease with no small success, combined sometimes with wine, and sometimes with bark - it is a Medicine which will be found at times Nauseous & disagreeable to the taste - but the patient will soon be familiarized to it on repetition; it may be given in Substance, Spirituous Solution, Watery infusion & Milk, this last substance being found to dissolve it readily, it does not however answer so well alone as combined with some other article, particularly Opium; the dose is 5 grains every two hours

Musk is a Medicine of the highest value not only on account of its stimulant effect but also on account of its diaphoretic and anodyne quality, frequently relieving delirium and inducing a pleasant & refreshing sleep when opium fails, it is peculiarly calculated to relieve subsultus tendinum and is given in doses of 4 or 6 grains every 2 hours.

Castor, I have never used this, but it is spoken highly of by Fordyce and others, its effects are improved when joined with opium.

Assafoetida is a medicine that may be employed both early and late in this disease, I have used a watery solution in the quantity of ℥j in the 24 hours, prepared by being rubbed down with a proper quantity of Sugar. it seems adapted to the subsultus tendinum which is so striking a symptom in this fever,

and besides its stimulent effects, it is evidently suited to Typhus Pneumonia, on account of its expectorant power, consequently we find it suited to every form of the disease —

Hitherto I have said nothing with regard to Wine, probably the most important remedy in the treatment of this disease; Typhus in Camps, Hospitals &c — cannot be treated without it — as an agreeable and efficacious Cordial — Pringle has justly remarked that there is none equal to it. In the Hospital he used about a quarth alone and combined with articles of diet as, Panads &c — but of the hospitals he used Rhenish Wine and both with the happiest effects — In Typhus gravior it may be more liberally prescribed than Pringle has done, when we cannot introduce sufficient quantities into the Stomach by the mouth, it may be thrown up the rectum

in the form of Whey either alone or combined with bark, When wine cannot be used, or when the patient prefers it, which is sometimes the case, Porter may be used and will be found an invaluable medicine, it is sometimes preferable to Wine & probably from its containing opium, especially if the Porter be well hopped –

Ardent Spirits, Is sometimes used, but I have never had occasion to prescribe it, for I have seen no case, which could not be treated as well by good strong wine, and few, I believe, of my brother practitioners have been necessitated to resorte to the use of stronger liquor, It is a Rule which should not be forgotten that in those low states we are apt to over stimulate and thereby cause the death of our patient, consequently I see but little use to employ distilled ardent spirits,

when the disease can be treated upon safer principles. The Wine I prefer is strong Port, and is one the sick Soldier should never be without. There is no article a more suitable & pleasent cordial than Wine Whey and all practitioners should be acquainted with the method of preparing it. ℞ – of Milk 1 pint & boil it, to which add a sufficient quantity of Wine to make a coagulum, then remove it from the fire, and strain it through Muslin, being cautious that you do not agitate the mixture, lest some of the coagulum pass through and render the Whey of a turbid colour, for when properly prepared it is perfectly transparent; it takes generally about 1 gill of Wine to a pint of Milk; though it is a matter of no importance if more be added, for if necessary it can be diluted afterwards; being made, Nutmeg & Sugar must be added; though it is rarely necessary to employ distilled

Spirits in this disease, it is advantageously employed, by bathing the body generally with them when heated, but I have never used it applied in this way, except to the wrists, forehead, hands &c with good effects; I have previously observed, that I have never found it requisite to employ these remedies internally, Yet my brother Physicians have certainly given them with beneficial effects in the extremely low stages of this complaint.

I have above hinted at the use of Opium in this disease, and will observe that it is an invaluable remedy in certain cases; it is prescribed with the happiest effects in relieving some of the most alarming symptoms, particularly tremors, subsultus tendinum, & the delirium which comes on in the decline of the fever, but in the early stages when this affection of the brain appears we must not employ it, as it is not at all adapted to it

in that state of the disease, even however in the decline of the fever, this article is sometimes productive of the increase of delirium, for which it has been prescribed, and then we must desist it, and have recourse to the volatile alkali, which is preferable to the others, not only for that, but also for subsultus tendinum which is almost a uniform symptom in the last stage of this disease. Opium is used also with a view to its diaphoretic quality, and when I employ it with that view, I employ the Dover's Powder; but I must here caution you, against the too liberal use of this medicine, for Opium in this fever has a remarkably tendency to the surface, producing sometimes copious and debilitating sweats.

Dr. Sydenham, never gave this article in typhus untill the 12th day, but it may & should be administered at a much earlier period, when the pulse & other circumstances permit, and when used, if the delirium

be not increased by it, we may be assured that our practice is correct, as to the dose in this fever, it is difficult to say down any precise quantity, but in general it sh.d be large, and Cullen has here erred in limiting us to intervals of 8 hours, for its effects are over in 3 or at most 4 hours and require repetition; I much add, though Gentlemen, in relation to this medicine that I am not so partial to it as I formerly was and lean to the opinion of Dr Duncan that it sometimes leaves a tendency to delirium & effusions in the brain, increasing thirst and constipation of the bowels, and as to its stimulating effect, that is comparatively small, and far inferior to Vol: Alk: and the noble article wine.

The Semicupium is another important measure and for its different effects, I refer you to Dr Fordyce's dissertation on Fever.

Blisters are very important in the cure of this disease, but are especially suited to the 1st stage, particularly when applied to the breast in typhus Pneumonica and to the head in delirium; but in the last stage they are improper from the evacuation they produce and should not be administered, except with a view to their rubefacient effect, which indication can be better answered by another kind of application which will be mentioned hereafter. Dr Cullen was very scrupulous in his employment of this class of Medicines and should be employed only in the last stage when, as all ambiguity, as he expresses himself, is removed, but the professor was very incorrect in this opinion, for if he here applied them, they became dangerous from the evacuation they produced, & as Dr Hargdyce observes, "are apt to give rise to subsultus tendinum

and other formidable symptoms, most especially in women". Dr Home, however has employed Blisters in this stage, in a peculiar manner and with the very best effects, and that is, internally in the form of tincture of Cantharides in doses of from 20 to 30 drops - 4 or 5 times a day -

Sinapisms, in this stage, are far more preferable than blisters, because they stimulate more & produce no evacuation, consequently they are more peculiarly suited, while blisters are more especially adapted to the first stage; they are applied to the wrists, ankles, Calves of the legs &c - and when applied they should be weak and not be applied more than 2 hours, as they are apt to be followed by gangrene,

Salivation, as I previously observed cannot be excited too soon, and when employed in the 1st 2nd & beginning of the 3d stage, I feel myself

confident in asserting, that it has saved many from the grave, but if it takes place in the lowest stages of this fever attended by hemorrhage &c — you may consider it as unfavourable; the salivation must be slight.

The drink of the patient should be acidulated barley water, diluents &c. the position of the patient sh.d be particularly attended to, we should always be careful to see that he is lying in a horizontal manner, & never suffer him to rise or sit up as that would occasion a dangerous debility, Diarrhoea not unfrequently occurs in the decline of typhus and is a troublesome & dangerous a symptom; and let me caution you never check it by astringents or Laudanum, for when sup-pressed the patient is much wasted & often dies; the most that I do is to keep it under by the chalk Julap. If the Parotid glands suppurat-

they must be opened. Typhus sometimes takes on the form of an irregular intermittent, and our chief remedy here is Cinchona, but we may sometimes consider it as being of a hectic character, arising from internal abscess, for the most part in the lungs and we may then resort to Arsenic, as much advantage is to be derived from this Medicine in such cases, without being attended by that tightness of the Chest, which is pretty uniformly ~~[illegible]~~ occasioned by the use of bark in genuine Hectic. Some practitioners speak in high terms of the use of Arsenic in all states of Typhus, if adapted to any, it must be the first; but from the theory of the Modus Operandi of this Medicine, which I have assumed, and think it an improper remedy I would absolutely object to its employment in this disease,

notwithstanding the most strenuous and forcible encomiums of the Physicians of New England and New York. —

Of Dysentery. (*)

Dr Cullen in treating of this disease has arranged it improperly, in my opinion, under the order Profluvia, for as Sydenham observes it is a true, febris introversa, and as an evidence of this, fever often runs into it, and Dysentery often runs into fever; Professor Cullen has but one species, but several varietys are described under it in the following manner, viz a contagious disease in which there are frequent stools; sometimes mucous & sometimes bloody, accompanied by tormina & tenesmus, the natural foeces being mostly retained and when

(*) Contagious Pyrexia, frequent mucous or bloody stools, foeces being generally retained, gripes Tenesmus &c — (Cullen)

and when evacuated they are in the form of Scybala, which is always attended by relief to the patient; but for a more exact detail of the phenomena, I refer you to his first lines; his varieties are first Dysentery accompanied by worms — 2ly Intermittent Dysentery — 3d that which is designated by mucous discharges alone and constituting the Morbus Mucosus of authors. 4th that which is attended by miliary eruptions, to which I add, the Scorbutic dysentery, a variety which the professor has neglected to mention. Besides the Symptoms which are so minutely detailed by Cullen, the patient is sometimes affected with so great a degree of irritability of the bowels, that when any aliment is taken into the stomach, he immediately feels an inclination to evacuate & in his attempts to do so, nothing passes off but mucus, it not unfrequently happens

that the person affected with Dysentery is also, at the same time with a great difficulty voiding urine, which Dr attributes to the improper method of treating the disease, particularly by the too early exhibition of opiates, but I am inclined to think, that it is symptomatic of the affection of the intestinal canal, since it has been taken notice of by a number of Authors who have noticed this disease.

The Aphthous Tongue which Dr Sydenham speaks of as always being the most unfavourable symptom I have never seen but once, and then it was the precursor of death, the case terminating fatally soon after its appearance.

Dysentery is sometimes converted into other diseases, as, diarrhoea, lientery, intermittent, rheumatism, & opthalmia — Dr Sydenham remarks, that no fever accompanies this disease, but there he errs extremely for there is more

or less of fever constantly present, which is either of the inflammatory or typhus type, and when the phlogistic diathesis is very great, the disease terminates mostly quick - and danger is to be apprehended from gangrene of the intestines; but when the typhus action prevails, its duration, like that of genuine typhus is long.

Of the causes of Dysentery.

It is not necessary that I should spend much time in the investigation of the causes of this disease, for it will be very evident from a very little reflection that they are the same that give rise to fever in general, and consequently establishing the identity of the two & the propriety of my arrangement.

These causes are Marsh Miasma, Idiomiasma, & cold, When Intermittents prevail it is no uncommon thing to see a part of a family affected with genuine intermittent, and another part with true dysentery, which puts on the

Tertian type, which circumstance establishes the sameness of the two diseases, the affinity between dysentery & bilious remittents, is also evinced ~~by~~ from both being epidemic at the same time; and in proof of the identity of the causes which give rise to dysentery & typhus, Dr Douglas informs us that both of these affections were epidemic at the same time, and were ultimately cured by the same remedies, the principal of which was the Peruvian Bark — In the year 93 I had many opportunities of seeing the analogy between this disease & yellow fever, for it was no unusual circumstance to see, different parts of the same family dying with both diseases; hence it is manifest, that whatever causes produce fever, wether intermittent, remittent, or continued, are alike productive of the complaint under consideration, and Sir John Pringle was

of the same opinion, except that the disease was of a contagious nature; but with respect to this there is with me considerable doubt.

Professor Cullen admits that Cold can produce dysentery, but thinks that it is evidently contagious and is of opinion, that cold commonly act after contagion has been received into the system; but is certainly a frequent cause by suppressing perspiration, and even the simple application of cold to the feet, will sometimes give rise to the disease, when no contagion could be suspected to exist in the system. Gout too turned upon the intestines will sometimes produce a similar affection of the intestinal canal, Dr. Dancer of the West Indies concurred in opinion with Pringle & Cullen — while Mosely living in the same climate was entirely on the other side — Dr Hunter remarks, that in the

hospital practice there was no reason to induce him to believe that it was contagious, but nevertheless, though that under peculiar circumstances it might be rendered so, and indeed, I was formerly of the same opinion, but subsequent observations lead me to determine, that it cannot in any manner be propagated by actual contact or at a very short distance, in which sense I use the term contagion, but that it may arise from the effluvia of foeces of a person labouring under it, I have never once doubted, if it be complicated with Typhus, I consider it no farther contagious than that fever is, and that typhus is far more readily communicable than dysentery itself is.

Of the proximate cause. This consists according to Cullen of a preternatural constriction of the Colon occasioning those spasmodic effects,

which are felt in severe gripings, and which being propagated downwards towards the rectum, occasions frequent stools & tenesmus. Hoffman again thinks it depends upon an oscillation or convulsion of the large intestines principally and considers it only as a local disease with which the system sympathisis in consequence of the great communication between it & the alimentary canal, that dysentery is sometimes a topical affection, I am induced to believe from its having been so readily cured by the use of laudanum.

Of appearances upon dissection. In warm climates the liver or spleen is always in some measure diseased. Mr. Bogue of Bombay informs us, that in his dissections, the liver appeared enlarged, in some cases indurated & in others so soft as to be easily torn on being handled, he frequently observed

abscesses in it, which were in some cases large and in others extremely small, The Spleen & Pancreas were generally very much enlarged, and in two cases which came under his notice, where the liver was not at all affected the Spleen was reduced to a black coagulum.

Of the Cure.

In treating dysentery we should always be attentive to the state of the pulse, which is sometimes so active as to require bleeding, and that in large quantities, particularly when it occurs in the spring season, & this is to prevent gangrene of the bowels, though in the epidemical dysentery of 97, I found phlebotomy, not only unnecessary but absolutely improper; in prescribing blood letting we should always attend to the nature of the prevailing epidemic, & if it should be typhus, altho' the pulse be full, even then we should not practice it.

Cathartics, judiciously employed so as to promote the natural evacuation of the fæces, are the most important of our remedies, & of these, different kinds have been praised to the disadvantage of others, which have been just as strongly recommended, The following are those which have been principally in use viz Castor oil, flowers of Sulphur, Juglans Cinerea, tartar emetic in divided doses – Neutral Salts, & Calomel alone, or combined with Rhubarb,

The Oleum Ricini is given in doses of ℥j in strong Coffee or milk, I have derived considerable advantage from a preparation of this medicine which I call the oily mixture, particularly adapted to the dysenteries of Children, convalescent adults, who do not require much purging.

℞ — Ol. Ricini ℥j rubbed down with sugar or Gum arabic ℥ij or ℥iij to which add of aqua

pura ℥vj. To this mixture laudanum is sometimes added, or it may be given in the intervals;

The Juglans Cinerea, though much extolled, partakes too much of the astringent nature of Rhubarb to be a valuable medicine in this disease; and of the flowers of Sulphur I have had but little experience, but the authority of Hoffman should induce us to try it; a much better medicine than either of these, is the glauber Salts administered in combination with tartarized Antimony in the dose of ʒij of the solution of the former with $\frac{1}{8}$ $\frac{1}{10}$ or $\frac{1}{16}$ of a grain of the latter every 2 hours, in place of the tartar emetic, 15 drops of the antimonial wine may be added.

Hitherto I have said nothing of the agency of Mercurial purges, in curing dysentery, and of these, as I before observed, Calomel is most resorted to, in prescribing this remedy we should

in some measure, be influenced by the nature of the prevailing epidemic, and if this should be fever of the bilious ~~kind~~ type, its use is perpetually indicated, & moreover in obstinate dysenteries when the common Cathartics are not sufficient to produce a sufficiente evacuation, we sh^d have recourse to this Medicine, but as Cathartics are such important remedies in this disease, ad require such frequent repetition, mercurial purges might induce a dangerous salivation so as to be productive of a mortal hemorrhage between the interstices or Caries of the jaw bone. Moseleys vitriolic solution is an excellent remedy in this desease and is spoken highly of by that Gent^n who seemed to rely greatly on its nau-seating effects, together with this, it is certainly in some degree diaphoretic, and excites a

purgative influence in the bowels. I have never employed it, though from the great eulogy bestowed upon it by a graduate of S. Carolina, where it was the chief remedy, & the coincidence of his remarks, & Dr. Mosely's there is no doubt of the utility of this preparation, and where I to say in what particular stage, that it is peculiarly adapted, I should say, that it ought to be prescribed in the latter part of the disease, when purgatives are not so much wanting, and astringents are necessary. The following is the formula.

℞ Alum — ℥j
white vitriol ℥iij
Cochineal grs iij these ingredients are to be pubbed down, and then add a pint of water; dose, to puke an adult ℥ ss. to nauseate a small table spoonfuce, & a tea spoonfuce for a Child.

Enemata, are indispensible measures in this disease, by their sheathing the intestines from the acrimony of the fluids, and at the same time given relief from the painfull tenesmus, which so often accompanies it, more especially when a anodyne of opium is ~~accompanied~~ combined. They are chiefly starch made into an enema with water, and used either alone or combined with laudanum, barley water, Mullen tea, which acts not only from its sheathing quality, but from its being itself, something of an anodyne, we have sometimes, to rely almost entirely upon this class of Medicines, from the irritability of the stomach, interrupting the cathartic plan almost totally; Dr Heberden prescribed glysters, in the intervals of the administration of purges, and

Dr. Hunter used, what he called, the antiseptic glysters, when he expected the tendency to gangrene existing in the bowels; they were composed of bark and vitriolic acid, which in my opinion acted more as a tonic than an antiseptic.

Emetics, These have in general been prescribed before any other medicine wether bleeding, purging, or any other, especially when the disease was complicated with, or partook of the nature of bilious fever, but in the United States it is rarely found necessary to go farther than to excite some degree of Nausea. The Specac: and Ceratum antimonium have both been prescribed on the old continent & it is said with advantage — Sir John Pringle used the latter, but found it quite inadequate to answer his intentions, he then had recourse to the Specac: and tartar emetic; he prescribed the former

in the quantity of 5 grs. every 2 hours, untill the desired effect was obtained — My method of using it is 1½ or 2 grains of Ipecac: combined with a small quantity of Creta or Nitre every 2 hours, untill a small degree of Nausea is produced & if the bowels are in a very irritable state, I add a suitable quantity of opium. Ipecac: is peculiarly adapted to Dysenterea Cruenta, or bloody flux; but it is not proper where Scybala exist and where the operation of Cathartics, is necessary for the removal of these, but then it should be administered in the intervals of purging, and when Dysentery is of a typhus type it is only useful as an emetic.

Of the modus operandi of Ipecac: in this disease, there have been different opinions;

Dr Cullen supposed it to be useful only so far as it was purgative, and it had no decided superiority over the Tartar Emetic. Mosely imagined it was usefull principally by its diaphoretic quality, and Dr Akenside again rejected the idea of its being successfull from its sudorific effects, but supposed it acted by virtue of its antispasmodic property, relaxing the intestines and rendering their contents more soluble, whereby they were easily evacuated; but I do not adopt the opinion of either of these gentlemen, for I have often seen the most decided advantage arise from the use of this Medicine when it neither sweated, purged, or Puked, and consequently I think, that its operation is peculiar, or in other words specific.

<u>Diaphoretics</u>, are very usefull medicines in

Dysentery, more especially when it arises from cold, when there exists, for the most part a dry skin, but I by no means accord with Dr. Mosely who seems to think that Diaphoretics are alone usefull to the exclusion of Cathartics, The form of medicine which I prescribe is the Dovers Powder, sometimes combined with Nitre, The Asclepias Decumbens which has been spoken of as highly usefull, must act chiefly by its diaphoretic power, its virtue as a Cathartic being extremely small.

Of Opium in Dysentery. I am of opinion that this disease cannot be managed without the use of this medicine; there have been many disputes with regard to the time, quantity & state of the disease in which this remedy should be prescribed. Sydenham treated it almost exclusively ~~with~~ by opium, while Cullen who has seen little of the disease was very scrupulous about

employing it. Sydenham commonly prescribed his Cathartic, but always used his Anodyne draught at night, & where this, febris introversa, as he termed it was very obstinate, he did not neglect the use of Opium in large quantities, but usually gave 30 drops of Liquid Laudanum, and the frequent repetition of anodyne glysters — I have found the disease by no means easily managed without an early and a liberal employment of this remedy, though the Europeans have not been able to use Opium so freely, and among them Pringle observes, that he could not use this remedy without an aggravation of symptoms, in the early part of the disease & was always obliged to use frequent purging before the employment of opium, and when he could prescribe it, it was done with a sparing hand — Dr Heberden was also of opinion that opium, when exhibited early was, mortal & absolutely rejects it, except in the

last stage, and then in very small quantities. But in opposition to the testimony of this gentleman, Dr Lind informs us of this article is indispensable & Dr. gives us an account of those epidemic dysenteries which were treated alone by opium, that being found the only remedy to relieve pain & bring away stercoraceous matter, cathartics having been employed in vain for that purpose. It is certainly a nice matter, to decide upon the propriety of the administration of this article, but ... we may hold it as a rule, that when there is a great degree of phlogistic diathesis and when the Scybala are retained that it is improper, but when there have been removed by proper measures, it becomes indispensibly necessary and will be found to be the only means in relieving the tenesmus which is so distressing a symptom in this complaint. In the Epidemic of 95 I treated my patients at first chiefly upon

the Cathartic plan, to the last stage, ~~but~~ found from the impropriety of the method, and had recourse to opium which pretty generally relieved tenesmus and answered my best expectations.

Blisters are very important applications to relieve the pain of this disease, and may be applied to the abdomen, ankles & wrists; the first way is extremely unpleasant & disagreeable to the patient, but when the pains are so very violent as to indicate a tendency to gangrene, we must lay aside all scruples, and immediately have recourse to it, but when the pains are not so severe, those applied to the ankles & wrists, will be found useful in moderating them.

Sinapisms, are chiefly adapted to Typhus Dysentery — Dr Hartley gave Nux vomica to a dog and in order to obviate its deliterious tendency, he whipped the animal in such a

a manner as entirely to obviate them and it is probable that flagellation might act in a similar manner in relieving dysentery, but it is a measure, that I expect it wou'd not be acceeded to in an American army.

of <u>Salivation in Dysentery</u>. This plan originated as far as I am able to discover, in this City many years ago and the method of prescribing Mercury was in the form of Calomel combined with Opium, & Dr Clarke, who has since adopted it, considers the plan as specific in the disease. I imitated the practice in the year 95 and was so successfull that I absolutely thought that if a Ptyalism could be excited by mercury, my patient was out of all danger; but two cases have since deterred me, from persuing this plan, in one after all the dysenteric Symptoms had been removed a mortal

hemorrhagy ensued in consequence of the stimulus of Mercury; and in the other a caries of the Jaw supervened. I would therefore advise a cauteous use of this measure and restrict it to the disease when combined with yellow fever or is complicated with typhus, and then the salivation should be slight. If after the employment of Mercury 3 or 4 days, there should be no sensible effect on the gums, and no benefit in other respects be produced, I would advise you to lay it aside as a hazardous remedy; In the dysentery complicated with Scurvey, all agree in the impropriety of employing mercury in any way. The Diet of the Patient should be of a vegetable kind, as fruits in particular, barley water, rice, then Soups, Milk which is better when made into whey, or when boiled, to these should be added small quantities of animal food, as beef tea, when the disease partakes of the Typhus ~~stage~~ type

Of Tonics. These are generally not much required, except in the protracted form of the disease, when it is kept up from debility & habit; and here the Peruvian bark is the principal remedy which has been spoken of highly by Pringle & Douglass. Simarouba has also been thought an excellent remedy in this state of dysentery, and indeed we are told by the french, that it exerts a specific action and should be used in all stages & particularly the decline, but the observations of the English Physicians give a negative to this opinion, in whose hands it has setled down to a usefull tonic.

Flores Arnicæ. Dr informs us that he has succeeded with these in putrid dysentery when every thing else had failed, I have never employed them, but think, from the intensely bitter taste of the flowers, that they may be

well adapted to this protracted form of the complaint, they may be given in decoction or infusion. The Serpentaria has been employed by Pringle and others with great advantage in Typhus dysentery — There sometimes succeeds to the disease a paralytic affection of one arm & leg; which I have seen in several instances; those authors who have noticed this circumstance have attributed it, to the imprudent use of Astringents, and indeed in those cases, which I saw, I was induced to believe that it originated from that cause —

Of Diarrhoea.

Dr. Cullen describes this disease in the following manner; A disease in which there are frequent stools, not contagious, and with which there exists no primary or idiopathic fever.

The Professor, has erred considerably in placing this among his Neurosis - for as Dr Mosely & Rush have said, it is truly, an intestinal state of fever, as this symptom is constantly present, so it belongs to the class Pyrexia. The Edinburgh professor notices several species which in my opinion are only varieties of the same disease, — 1st the Crapulent, in which the stools are more liquid, frequent, and greater quantity than is natural, this is the same as common Diarrhoea — 2nd Bilious in which the discharges are of a Yellow or Bilious colour — 3d Mucous Diarrhoea in which the discharges are of a Mucous nature, this originates from Cold & is a kind to which gouty people, are particularly subject, when gout is thrown from the extremities to the intestines — If the

4th The Coeliac diarrhoea in which a whitish matter is discharged in considerable quantities and so nearly resembles Chyle, that it has been taken for it; but nevertheless it is evi-dently different — 5th " lienteria diarrhoea in which the food is evacuated almost in the same state in which it was swallowed being but little digested — 6th " The hepatic, this originates from the liver & the matter discharged is of a bloody serous colour eva-cuated in large quantities & without pain.

Of the Causes.

These are precisely the same as those, that give rise to fevers in general, wether in-termittents, remittents, or continued, as marsh Miasma, Cold &c — We have many instances shewing that putrid animal

substances are productive of it, as is illustrated from putrid dead bodies, exposed in the field of battle, and communicated at the same time Fevers, Dysenteries, Diarrhoeas, to these may be added, the taking in of acrid substances, improperly digested aliment, and an indurated state of the Mesenteric glands, arising from Scrophula & other causes.

Of the Cure.

The most important of the class of Medicines employed for the cure of Diarrhoea are astringents, wether taken from the vegetable or Mineral kingdom, but with respect to these, a certain rule is necessary to be attended to viz. That they should never be prescribed without a regard to the state of the pulse & heat of the skin; We are plentifully furnished with this

kind of remedies, some possessing a greater degree of sedative or stimulent power than others.

At the head of the astringents I do not hesitate to place the Terra Japonica or Kino, for they so nearly resemble each other, that Apothecaries can with difficulty distinguish them, they are both brown, brittle, and gum resinous, vegetable matters possessing nearly equal degrees of astringency, but I think the former is most powerfull; it is a favourite remedy with me, and I have succeeded with it, when other remedies of greater repute have failed; my formula is the following.

℞ Terra Japonica or Kino — ℥j
Sugar & Gum Arabic each ℥ij
Cinnamon or Mint Water ℥j
Aqua pura — — — — — ℥vij of this

a tea spoonfull should be given every hour, so that the whole should be taken in the course of the day; for it is necessary that the patient should take ℥j of the Vino, at any rate in that time, provided no inconvenience prevent; if this formula be not taken, the Tincture may be employed, but that is ob-
-jectionable on account of the spirit contained, It may be prescribed in powder in the dose of 6 or 8 grains — 6 or 8 times in the 24 hours — The decoction of Logwood, has been found efficacious and also the galls in strong infu-
-sion; but of this the patient cannot easily bear more than ℥i a day) — Rhubarb prescribed in very small doses has been very much recommended, but of all the Medicines which I have ever used in Diarrhoea,

none has surpassed the Sol: Plumbi: This is to be given in doses of 1 or 2 grains in the 24 hours in combination with Opium, when it is much safer, than when administered alone, We must not forget however, that if it does not do good in the course of 3 or 4 days we must lay it aside, for by continuing its use much longer, a large quantity would collect in the System and produce deleterious consequences —

Emetics — are often found valuable agents in the cure of Diarrhoea, and should be principally of the astringent kind, such as infusions of galls, weak solutions of Allum, Solutions of Kino, & probably of Sacharum Saturni, which I have never used, these are especially adapted to lientery — Absorbents have at times been of excellent use, and their goodness seems to depend upon the quantity of acid, generated in the

stomach, which they neutralize, and of these the principal are lime water & magnesia, the former seems to possess, not only an absorbent but an astringent power, by the agency of which it may alone cure the disease.

In Intermittent Diarrhoea our remedies are bark & laudanum, when the disease has lasted for a considerable time, Iron has been found of considerable advantage, either alone or combined with bark.

Blisters are remedies of great importance & what we have said relative to their use in Dysentery, is applicable here. I have frequently informed you, that fever accompanies this form of disease, and when the pulse informs you, it is necessary to detract blood — Bleeding in small quantities & frequently repeated is, in my opinion the most efficacious — inflammation some

times exist in the intestinal canal, were the pulse will no longer be the "Dial plate" to the system, and consequently will afford us no information, as it regards the degree of inflammation; the blood drawn will generally be found to have a buffy coat, Topical bleeding by means of Leeches has been found to be of service.

In Diarrhœa of long standing, besides the remedies already noticed, I have been remarkably successfull by means of issues, which in such cases, should always be resorted to in the decline of life, they should be made on the lower extremities just above the garter tie.

In the same form of the disease, a moderate salivation has cured, when every thing else had failed, it should be excited by the blue pill in the dose of 1 grain, combined with opium every night; it is not attended with that danger

which attends Salivation in Dysentery; Change of Climate has likewise cured Diarrhoea when all the Medicines of Materia Medica, had been used in vain; I would recommend a warm climate.

Emetics are likewise very usefull Medicines and are employed, not only with a view to excite a full evacuation, but also to excite some degree of Nausea. They are the chief Medicines relied on when the disease arises from an acrid matter taken into the Stomach; and I would ask what would be the effects of the dry vomit in the long standing & obstinate ~~causes~~ cases of this complaint.

My own opinion is, that it may be administered with considerable advantage, but only in those stages occurring in torpid habits, as in palsy, Rheumatism —

The formula is equal parts of Ipecac: or Tartar

Emetic, with blue Vitriol 1 or 1½ grains of each, But I generally prefer Ipecac: to all other Medicines, in common cases.

Diaphoretics are, besides the remedies already mentioned, of considerable advantage in some states of the disease, particularly when the Diarrhœa is symptomatic of the prevailing epidemic as it occurs in Autumn; but in a Chronic stage we cannot expect so much from them; but Flannel is always to be used here, more particularly in old people, not only when the weather, is variable, as in Spring & Winter, but in Autumn.

Cholera Morbus.

Professor Cullen here, as in other diseases of the like character, has arranged it improperly, under his order Spasmi, for it is properly a febrile disease and should be placed along with those previously treated of, under the title of Pyrexia.

Dr. Cullen prescribes it in the following manner;
A disease in which there is a simultaneous vomiting & purging, accompanied with distressing griping, great anxiety & painfull spasms in the lower extremeties, particularly the calves of the legs,
Cholera Morbus occurs especially in Warm climates and, but very seldom, in Cold; it is much less common in England than in the U. States, it is extremely rare in Scotland, it is not known in Sweeden; but in the W. Indies it is an extremely common & mortal disease and occurs oftenest in the hot seasons of the Year, and in Philadelphia, though it appears oftenest at those times, yet it is not uncommon to meet with it in Spring & winter —
The attack is for the most part very sudden, quickly inducing the most dangerous state of

debility, and in the U. States, it is no uncommon thing to see the patient vomit upwards of 50 or 60 times in the day; so great is the influence of so much vomiting on the System in general & on the countenance in particular, that the most animated eye, loses, in a short time its natural lustre, and every feature becomes so distorted, as not to be known, scarcely, by the nearest relation. — The Matter discharged is almost entirely of a bilious nature, sometimes pure bile, at others green, brown & black, though not the black vomit of the yellow fever — The pulse is at first full & strong, but it quick-ly sinks; this frequent vomiting affords as a remarkable instance of the secretory pow-ers of the liver, for matter discharged is only a vitiated secretion of that viscus — Its first attack is generally in bed, while the patient

is warmly covered, it is sometimes of a remittent and frequently of a tertian type, and in this manner, it frequently appears in the Eastern shores of Maryland —

Causes.

There are intemperance of eating, Gout translated from the extremities; Some say Worms, but these probably concur in aggravating the disease when it does appear; Crabs and Oysters in a state of putrescence; Lobsters, these are so common a cause that many are afraid to eat them, after being brought on the table; the bites of venemous serpents, Mineral poisons, as Copper Antimony, the oxide and other preparations of Arsenic; Mercurials & turbeth Mineral &c —

Of the Cure.

Dr Sydenhams, Method — was in the first

place, to encourage the thorough evacuation of the offending matter, by diluents employed in large quantities, he afterwards to the large use of Opium, this is very correct practice, when the energy of the System is not so far wasted, as to render it dangerous for us to abstain from Opium too long; After the diluents have been employed, the opium should be given very largely & combined with Mint water — If upon this treatment the progress of the disease is suddenly arrested, and heat & thirst, and constipation of the bowels ensue we must lay aside the Opium and have recourse again to diluents, in the form of Enemeta, as chicken broth, barley water &c — to relieve the costiveness & tenesmus which sometimes occurs in

Cholera — But it often happens, that the progress of the disease is so violent, especially in old people, that there is no time for diluents and we must resort to the prompt & ready use of Opium, both by the mouth and anus, and in this state I have recourse to other very powerfull stimulants, which procure effects that cannot be answered by any other measure; so important do I conceive them, that they should never be dispensed with in that state of the System; I allude to the application of Sinapisms, to the wrists, ankles, abdomen, & more especially to the Calves of the legs, When the spasm occurs — Blisters are likewise very effecacious Medicines, but their action is not so prompt as that of Sinapisms. The Spasm may likewise be relieved by the use of the warm bath, and when that is inconvenient to the patient, it may be substituted by spirituous

fomentations with flannels on the Abdomen, Bleeding is to be resorted to, in the first instance when the pulse is full & strong; but it has often been prescribed improperly, and is a practice but little followed by my brother practitioners, though if prudently directed it may greatly contribute to save the Patient. —— The drinking of Cold Water has been highly recommended by Aurelius and other Ancient Physicians with a view, as they report, to relieve the inordinate heat of the stomach, which attends this complaint, we see that their conception of the disease from this circumstance was very rational and the high recommendations from the Spanish Physicians should induce us to try it; although I never have.

Much has been said of the efficacy of bitters in Cholera Morbus and particularly the Colombo;

This has originated, in my opinion, entirely from the idea of antiseptic powers of this vegetable, entertained by Dr Percival, which he supposed acted by correcting the putridity of the bile; upon which he imagined the disease to depend, and consequently was prescribed in all stages of the disease; but it has no greater claim to an antiseptic power than bark, and other remedies of the same family, and therefore is only useful as a tonic, Cholera Tertiana, is to be cured by the plentifull administration of Bark in the intervals, and laudanum in the days of attack.

Cholera Infantum.

This disease is precisely the same as the former, only the one attacking children; and the other, those who are grown; it seems to have existed first, in the U. States, and is by no means common in to the Northern parts of Europe, or any part of the old continent, except in the East Indies,

where its violence is so great, as (I expect) to give but little opportunitys to the Physicians of that country to mark its Phenomena. I therefore conclude that it is a disease by no means confined to the U. States, but exists on the old continent, especially towards the South, in the East Indies, only in a more aggravated form — ——— It appears principally in hot climates and is infinitely more prevalent in large Cities than in the Country, in Charleston it appears about Apric 1 May — but here it rarely comes on ~~till~~ before June, and is very prevalent from the Middle of that Month, untill sometime in Septem.r —

It is confined to Child.n of from 3 wks to 2 years old, and rarely, if ever, makes its appearance before the former period; it is a popular belief that Child.n are more subject to it the 2.nd summer after birth, and it is probable that this circum-stance may derive some support from dentition,

rendering them more liable to this disease at that time than any other; It sometimes comes with a slight Diarhœa or laxy, but more often with a vomiting or purging, as in Cholera Morbus, the fever being seldom so great as in adults, and sometimes little or none.

The matter discharged at first, is often nothing more than the Milk which the child had swal-lowed, mixed with mucus, at other times pure bile, then again of a greenish colour, and sometimes a watery fluid is thrown up, possessing a peculiar ~~sower~~ sour smell.

The Child suffers great pain, though, com-paratively, not so much as in adults, the legs are subject to a kind of spasm, as is evinced from the circumstance of the childs draw-ing up its legs, which is also a proof of the pain it suffers, The pulse is very various

being sometimes strong & full, and at others weak & frequent; The head is often morbidly hot, and the feet are cold; while the Child is affected with a kind of delirium or Mania, as appears from its appearance to bite the Nurse; the belly becomes tumid, the feet & legs swell, the eyes loose their natural vivacity — become full and prominent, the pupils dilate & strabismus supervenes; when we may be confident of the existence of hydrocephalus internus. Child.n in this disease rarely sleep, but may be said to dose with their eyes half open; There is great insensibility and indeed so much so that flies may light on the uncovered or naked eyes, without any manifestation of feeling from it.

The fever attending Cholera Infantum is rarely of a continued kind and never of the continents, but more often of the intermittent & remittent types, and observing the geo-

quotidian & tertian periods, when the paroxysms comes on in the evening.

Its duration is sometimes no longer than 48 hours though it is oftener from 2 to 3 days to 5 or 6 weeks, when at that time or before, we must expect a considerable change in the System, the action being then of a typhus kind.

Of the Causes.

A hot, still and moist atmosphere is the great & remote cause of this disease; but must also acknowledge, that a peculiar state of it, arising from repeated respiration & perspiration, or why, should it be more prevalent in the Cities, where we not to consider this circumstance as contributing to produce it, suppressed perspiration from cold, is also a frequent cause — Of the suppositious causes none appears, in my mind, more clearly established than that of teething,

and in proof of it, the disease is at no time so severe as from the 7th, to the 12th month; but it is by no means so principal a one as some would have us believe, for why should the disease appear at a particular season when the process of dentition is going on at every season of the year, and why also, should it prevail, particularly in Cities;

Worms, are in my opinion a more frequent cause & by far a more mortal one; I must here differ from the former Professor in this University; who maintained an Idea, that worm could never be productive of a primary & idiopathic fever.

Crude fruits are considered as another cause and especially the acid of the pine Apple, which not only gives rise to the disease in Children but in Adults; I, however do not consider ripe fruit, as concurring in any great degree in producing the disease in Children; since they are evidently

a very important aliment in securing the patient against any attack of the disease —

From what has been said relative to intermittent & remittent fevers, Diarrhœa & Dysentery, Cholera Morbus & Cholera Infantum, it will appear that they are nearly the same disease, and only differ in their modifications of each other, arising from the same remote & I may almost say, the same predisposing causes.

Of the Cure.

Our first indication of cure, in the treatment of this complaint, is to evacuate the Stomach and intestines, and for this purpose, nothing is better than weak chicken broth, Chamomile flowers made into a tea, Barley water &c, Purgatives of an active kind are never required, and the most we should do, is to open the bowels by some gentle laxative, of which there is none

better adapted than the oily mixture; the formula of which is given under the head of Dysentery; Magnesia rubbed down with Gum arabic & white Sugar & given in Milk is also a very good lax-ative, particularly if there be much acid in the Stomach; to these we may add small doses of Calomel & opium, if the discharge be foetid & bilious and we have reason to suspect the presence of Worms - Co-operating to render the disease more distressing - In administering Emetics great nicety is required, and indeed I never go further than to prescribe Chamomile tea with that view, which is fully adequate to answer every intention -

Opium is absolutely indispensible to allay the inordinate purging & puking which attend this complaint; the manner in which I have formerly prescribed, was in the form of the Cretaceous Julap, but finding that

very apt to spoil in warm weather, I have substituted the following

℞ of Opium 1gr. or Laudanum 25 drops

Gum Arabic or White Sugar	℥ij	The 3 first ingredients, are to be rubbed down, & then add the rest;
Magnesia	ʒfs	
Mint Water	℥fs	
Com. Water	℥ij	

Cinnamon Water is sometimes substituted, but Mint is preferable: of this a tea spoonfull may be given 8, 10, or 12 times in the 24 hours, to a Child 6 years old — To the simple method above prescribed, the disease will often readily yield —

There is great circumspection necessary in recommending blood letting in Cholera Infantum and indeed it is a practice I have never adopted, but do not doubt of its propriety; yet I have never found it necessary, and I have always had the gratification of seeing its use superseeded by sponging of the body with cold water, which is

indeed a Measure of the greatest importance; some have gone so far as to order buckets of Water to be thrown over the Child, but I should be unwilling to go farther than Sprinkling —

The disease very often becomes of a Chronic Nature, and when it arrives at this state a variety of Medicines of the astringent class have been recommended — Among these none has been more strenuously advocated than Alum combined with laudanum, by Dr. Rush and other respectable Physicians of this City; I have no doubt of the importance of the remedy, but I have great fault to find with the quantity given by those gentlemen. Doctor Rush informs us that the dose for a child was grs. every 2 hours for 24 hours; this quantity is absolutely unmanageable for it will, I expect, pretty generally puke & purge, consequencies which we are most desirous to avoid. In intermittents the Maximum dose of Alum is not more than 5 or

6 grains, and the medium about 3— every 3 or 4 hours, and consequently we must conclude that a dose much less than the above would suffice a Child with Cholera.

I should not think of giving more than 2 or 3 grs. in the 24 hours— In this state of the compt. I have found the formula of Kino or Terra Japonica described under the head of Diarrhoea, a much more efficacious medicine, and one which most children will take readily. Many of our native astringents have been found proposed in Cholera, in this stage, and none is of more deserved reputation, than the root of the Geranium Maculatum; It is the root which is used, and sh.d be boiled in Milk, which makes a very palatable astringent Medicine, and at the same time a large quantity of Nutritious matter is carried into the System, as few things of this kind are more so than Milk. A decoction of the root

of the black berry has been much extolled, the virtues of which, I imagine depend pretty much on its astringent principle.

The irritability of the stomach, so much attendant on Cholera Infantum, I have often successfully relieved by a use of the weak infusion of Mustard, which, in my opinion, is a valuable Medicine and one of the utmost importance; but in the Chronic stage there has been no Medicine more successfully employed than the Saccharum Saturni, and is one which, in my opinion, has saved many a child from the grave; it may be given to Children, of from one ½ to 2 years of age - in the quantity of 2 or 3 grains, in the form of emulsion, with Gum Arabic, in the 24 hours, Child.ⁿ are found to bare it proportionably better, than Adults —

Blisters are measures of the greatest importance, in the cure of this disease; they are found the best stimulants to support life, eminently

suited to suppress vomiting when applied to the stomach, and well calculated to relieve stupor when applied to the head; they sh.d be applied to the Ankles & Wrists, and more rarely to the Abdomen.

Sinapisms are likewise of great efficacy, but are more transient in their operation; they are also applied to the Ankles & Wrists and to the abdomen to relieve vomiting, but they must never be strong - nor more than 1/4 or 1/8 part of Mustard to the quantity of Meal made use of.

In this stage I have derived much advantage from the use of mild Cataplasms of boiled Onions, and the same of Salt and Vinegar.

As yet I have said nothing of Cordials, and of these Wine is best & porter next - It is a remark-able circumstance that the appetite of Child.n for strong drink in this state of disease is very great; and when it does exist, let them be in-

dulged, even though they should want it undiluted, for the appetite is natural, and we ought not with-hold it — it often happens that they prefer milk punch to any thing else, and when they do, there is nothing better suited for them — Dr Miller speaks very highly of small doses of Calomel & Opium, in the chronic form of Cholera Infantum, I have only employed it as a laxative I consequently can say nothing of its efficacy — The Dr Seems to have employed it as an alterative.

Of the Preventive Measures.

In the commencement of the hot Seasons, it should be the practice of the mother, to remove the Child from feather beds, as they tend to keep it warm and relaxed, and substitute a Matrass — Cradles should be particularly avoided, as they not only produce the inconvenience just mentioned, but also preclude

the ready admission of healthy & pure air — The occasional use of the Cold bath, should not be neglected, and we should be particular in accommodating the dress of the season, and also enjoin cleanliness — The indulgence of Salt ham & Salt fish is highly proper, as well as the use of animal food, in general such as beef & mutton — and the use of Porter and Wine at dinner, The child should always be indulged in the stimulating condiments, such as Mustard, horse Radish &c but never in pickles because they are of a hard, leathery, indigestible texture and not at all suited for them — I would also ask, would it not be proper for the mother, to pay some attention to her solid & fluid aliment? To this I will add, the removal from the City to the Country, before the commencement of the

hot months, I neglected to mention in the treat-
-ment of this disease, the use of the warm
bath, when the pain & uneasiness are great; and
if that is objected to, the application of flannels
wrung out in hot brandy applied to the
Abdomen.

The air in the vicinity of the Sea, is thought
to prevent Cholera Infantum entirely, so
that Dr. informs us that it never appears
at Lewistown — I will add that removal
from the City, even when the child seems un-
-able to bear the slightest fatigue, will cure
when every thing else has failed, and so
great is the importance of this circum-
-stance that we should never loose sight
of it.

Of the Phlegmasia.

Dr. Cullen described diseases of this kind, in the following manner; A Synocha or inflammatory fever, accompanied with topical pain, and injury experienced in the internal part, blood drawn, on becoming cold throws up a buffy coat.

Of these the first I shall speak of is

Rheumatism

Professor Cullen's arrangement of this disease, is not entirely correct, for in its most distinct & acute form it has much less phlegmasia than many others, and it is sometimes doubtfull wether it exists or not; it is so intimately allied to intermittent & remittent fever, that I may be excused for speaking of it so closely connected to them — Sydenham, near the close of his life, was obliged to acknowledge the

intimacy of the diseases, and Hippocrates spoke of to 300 years ago, as an intermittent.

Cullens definition of Rheumatism is as follows — a disease arising from an external cause, for the most part evident to the senses, attended with pyrexia (he should have added of the intermittent & remittent type) and pain affecting chiefly the large joints, and shooting along the Muscles sometimes, which pain is increased by external heat; The Edinburgh professor, has several species, but they are more properly varieties, of these the chief are Lumbago, a painfull affection of the loins; Rheumatismus Coccygeus, when the Muscles of the Sacrum & Coccyx are chiefly diseased — Sciaticus when the Muscles of the hip joint are affected, & Bastard Pleurisy when the Muscles of the Thorax are thus affected. Rheumatism is divided into two Kinds, viz.

the Acute & the Chronic; it is the former which properly belongs to this place, and is the first which we shall proceed to consider — It is a disease common to cold climates where Intermittents are but little known, but it is by no means peculiar to them, for it exists in all countries, where there is much vicissitude of weather, particularly in the U. States; but where the range of the Thermometer is moderate, as in Majorca & Minorca it is but seldom known. It makes its appearance, in the United States, in the winter, but also in the Spring & Autumn, scarcely ever in the Summer; it is most common in marshy situations, as in damp grounds, and I have been of opinion that Calcareous Soils, favour its existence, from communications that have been made to me, that

persons, living in calcareous grounds in Virginia, were extreemely subject to it.

Of the Causes.

1st. It arises most generally from the application of Cold, when the body is heated & especially when perspiring — 2nd. when cold is applied to a particular part of the body, while other parts of the body are preternaturally warm —

3rd — from wearing damp Clothes, and here Dr. Cullen stops; but independent of these, I will add Marsh Miasmata, as is clearly evinced from the circumstance of this disease & intermittents existing at the same time in the same family, and alternating with each other — Metallic Matters give rise to it, and this kind effects principally painters, potters, gilders & ~~also~~ most workers in lead, wether Arsenic has ever produced it, I am unable to say. —

Rheumatism, arising from the last mentioned cause is so nearly allied, in all its symptoms, to common Rheumatism, that it is extremely difficult to distinguish them; & if any difference does exist, it consists in the last being attended with obstinate costiveness, and in being more difficult to cure. A suppression of the discharge in Gonorrhoea is sometimes a cause of Rheumatism, and I have had occasion to see many cases of this kind, The patients thus affected will complain of most pain in the knee, and frequently of pain in the adjacent parts, it will not yield to bleeding and the Antiphlogistic measures, and is only to be effectually cured by renewing the discharge.

Of the Predisposing Causes.

Among these, Dr Gregory, has placed, Climates and the Seasons of Spring & Autumn, but

those, which properly predispose to the disease are a plethoric habit, violent exertions of the Muscles — profuse evacuations by sweat, & a peculiar irritable state of the mind — Persons between the age of puberty & 30 or 38 are most liable to it, though it may take place at a more advanced age, as well as in children of 4 or 5 years of age —

Of its Phenomena, It is always attended with pain, more or less severe, the viscera being rarely, if ever affected; this pain is seldom stationary, but generally is shooting from one joint to another, and is greatly increased from the exercise of the Muscles of the joints — It attacks principally the larger joints, such as the shoulder, hip, elbow, & knee, but sometimes the smaller joints are affected, as the Wrists and ankles, though the toes & fingers, are scarcely if ever affected,

The pain in the Wrists, is peculiarly apt to take place in painters Potters &c. which may probably arise, not only from the topical application of the substances, they are obliged to use, but also from the great exercise of that part; it sometimes happens, that the uneasiness is confined to one joint, but it is more generally diffused, and then a fever follows ushered in by a Cold stage. The pulse is full, frequent & hard; but there is an acute rheumatism especially occurring in Syphilis from the mercury employed in that disease in which the pulse, though frequent, is small. Dr Cullen remarks, that if no pyrexia exists, the pain is more apt to be confined to a particular part, but if it does take place, it will be more liable to shift from one place to another. The fever attending has an exacerbation every night, when the pains

are less stationary and greatly increased, from the heat of the bed cloaths, it is sometimes of an intermittent form, observing a tertian & quotidian period — After the pain has continued some time, redness & swelling come on, which in some measure alleviate the uneasiness of the part, though it is very sensible to the touch — Sweating sometimes occurs in the early stage, and though it seldom proves critical, yet a moist skin contributes greatly to the cure.

The Urine in the progress of the disease, becomes high coloured, and towards the last deposits, a lateritious sediment, which is sometimes critical, though it is by no means uncommon for it to continue some time afterwards — the blood drawn throws up a sizy coat & deposits an unusual quantity of red globules, which is in general proportionate

to the violence of the disease — From what has been said, it evidently appears, that Rheumatism is, of an intermediate nature between intermittent & remittent fevers, and genuine phlegmasia; the former being terminated by transparent gelatinous effusions into the theca of the tendons, and the latter terminates by a formation of pus, the tumors attendant on Rheumatic pains are followed by troublesome Ulcers, if opened.

Of its duration. It terminates in some persons in 4 or 5 days, but it is most apt to continue 10 days, & even several weeks; when it sometimes happens that the fever will subside & the pains will remain, but not so apt to shift as before & not so violent. The disease always proves more obstinate when the fever is of an intermittent type, than when it is continued — It never

attacks the stomach & brain like gout, but nevertheless in irritable habits and especially in those who are predisposed to gout, it will fix upon the heart & prove fatal.

Twelve cases of this kind were under the care of Dr. Dunlap - seven of whom died; Upon dissection the heart was found enlarged, pale, soft and extremely tender. There are several varieties of this disease - and first of Lumbago, which is attended with pains in the loins down the Sacrum - & to the Ureters, producing symptoms, at times similar to those of Nephritis, but distinguished from it, by the last being accompanied, by retching vomiting, and numbness extending along the thighs, it is always increased in an erect posture, & differs from common Rheumatism, by being insensible to the touch, it most commonly arises from

violence done to the loins, Sciatica is known by pain in the hips, extending down to the knee joint, it is the most obstinate form of Rheumatism, and is thought most nearly allied to Gout, from it sometimes alternating with affections of the Stomach; it sometimes produces a laxative of the joints, from relaxing the round ligament & abscess sometimes supervene; it has been produced in Women by a suppression of Milk.

The blood drawn in Acute Rheumatism is sizy; the surface concave, with depression in the middle and the edges elevated, which appearance is generally indicative of high arterial action; but nevertheless occurs in Articulo Morbis, and frequently in intermittent Rheumatism, when it is necessary to use the Cortex to cure the disease!

Of Chronic Rheumatism. Is the sequale of acute, and is termed by Dr Cullen Arthrodynia. he describes this disease in the following manner; After much straining or muscular efforts, or after acute Rheumatism, pains follow which are of short duration, increased by motion, and relieved by heat, but the limb becomes greatly enfeebled, rigid & cold and is seldom much swelled, and there exists for the most part, but little fever. Sweating is seldom universal but local, it is always cold & clammy, the pain of the part is increased by cold; which Phenomena distinguishes it readily from the acute form of the disease, previously described — Besides the above, there are other forms of the disease, as the Scorbutic, which is common in many of the Sea Port towns of Europe; and the Dysenteric Rheumatism known by the affection of the joints alternating with affections of the intestinal canal — Neither of which, have I ever had an opportunity of seeing. Besides these, there is Rheumatismus Catarrhus in which the Muscles

of the throat, are Rheumatically affected & attended with Catarrh.

Of the cure of Acute Rheumatism.

As this complaint is one of the inflammatory kind, the measures adopted in diseases of that character are necessary in this, the first and probably the most important part of our treatment is, absolutely a spare diet, which should consist entirely of vegetable matter, as preparations of Barley, rice &c — which sometimes may be conveniently acidulated — Bleeding has been considered by many as a remedy of the greatest importance, and Cullen approves of large & repeated bleedings, in the early stages of the disease, according to the state of the constitution & violence of the symptoms, but nevertheless, judiciously adds that such bleedings may sometimes render the cure more tardy & cause the Acute to pass into the Chronic form. — — I do certainly approve

of Bleeding in the early stage, but think, that Practice has been carried too far by the Physi-
-cians of the United States —
Sydenham in the first part of his life, thought highly of the efficacy of plentifull blood letting, but towards the close of his life, observing the affinity between Rheumatism & Intermittent fever, he was a much less advocate for the practice and treated the disease more upon the tonic plan, and since his day, the Physicians of Great Britain, have pursued the course chal-
-ked out by him, neglecting in a great degree venesection during the paroxysm & seizing upon the interval for the administration of the bark. When the disease arises in young plethoric habits, and arises from cold, bleeding is indispensible, but is less required when it partakes of the Nature of an Intermittent

and still less, if at all, when it arises from Metallic Matters. In the case of a Painter, thus affected, I found not the least impression made on the disease by this practice. In short, however, when it arises from Gold, we must resort to it, The appearance of the blood, does not always enable us to judge of its propriety for the buffy coat sometimes appears in the most atonic state of the disease.

Mr. Kelly has spoken highly of the application of a tourniquet, above the affected joint so as to compress the artery, & then to detract blood from the veins.

Dr. Darwin from Analogy suggests the employment of this remedy in Gout. but I think it could hardly be borne by any so unfortunate as to be affected by that disease, Topical bleeding with Leaches

has been found highly serviceable when the joint ~~has been~~ is much affected with pain, swelling & inflammation, though I think, I have sometimes seen it produce a metastasis of the affection.

Cathartics are of much greater importance in Rheumatism than blood letting, though Cullen objected to them, from their proving too great a stimulus to the intestines, and thereby aggravating the complaint; but this objection cannot extend to the milder ones, as oil, Senna &c – Calomel & Rhubarb is a favourite medicine with me, and this remedy, perhaps, is more properly adapted to intermittent rheumatism, than those arising from cold – I mean Cathartics in general

Emetics are remedies of considerable importance from their evacuating the stomach, operating downwards and determining to the surface, and are especially adapted to Rheumatism

of the Intermittent kind — Large doses of Nitre, after blood letting — have been prescribed and highly recommended by Dr Brohlesby — His practice was to dissolve ℥ij of Nitre in a pint of Water — of this a tea spoonfull was to be given every hour, if it should vomit, the Saline draught is to be substituted. The bowels are to be kept open by Cream of Tartar &c — By this practice the Dr. states, that he has been very successfull, but this quantity of Nitre could scarcely be borne by any person in the United States, and in fact we find that not more than ℥j can be borne in the twenty four hours, I have cured the disease often by one bleeding. By suitable quantities of Nitre combined with tartar emetic or antimonial wine and sometimes tincture of Digitalis and

followed at night by Dovers powders. Opium has been

I have seen the disease, in its acute form, repeatedly cured, in the Philad.a Alms house, by the following plan of treatment, pursued by Dr Klapp, physician of the Institution.

The Stomach was, in the first place, evacuated by the Tartar Emetic, and then Bark and Nitre were given in doses of grains xxx of the former to gr.s x of the latter, three or four times in the day — If after 6 or 8 days, the patients did not experience much relief, the Emetic was again repeated, and the Bark and Nitre continued as before.

The patients were generally benefitted immediately or in a few days, and recovered without swelling of the joints, so frequently attending this disease. This plan has been latterly much pursued in London.

(Erskine)

Opium has been prescribed in this disease, and Sydenham made it a rule, never to give it untill 5 days had elapsed, though it may be administered earlier, Yet we must receive it as an Aphorism, that if it does not prove di-aphoretic, it is of no kind of use, & with that view we have a preparation of Opium — infinitely more valuable than that Article itself — and one which is the most important Medicine in the cure of this complaint, & the rules by which we employ it, ought to be well known, I mean the Dover's powder, in which I suppose upwards of 1gr or 1½ of Opium and the same quantity of Ipecac: to be taken at a dose; for the rules by which we are to be guided in its administration, I refer You to Cullens Materia Medica — I will here observe that I ~~pre~~ prefer giving it at night, as I do not conceive sleep as incompatable

with sweating, it should be given with a small quantity of Water and no fluid should be drank directly after it, for fear it should vomit, but when sweat appear, it may be promoted by large quantities, drinking little at a time but frequently, The patient should be kept in Blankets During the Night, by which a universal sweat is produced, The neqt day he must be confined, leath dangerous & disagreeable consequences might arise from exposure to cold, By the help of this article, thus administered, I have cured by the agency of bleeding & purging in a short time.

Other Narcotics have been found of considerable benefit, and among these is Digitalis; from the great influence of this Medicine over the heart & Arteries, we may conclude, a priore that it would prove serviceable in Acute Rheumatism; Accordingly Dr. Currie of

Liverpool, has prescribed it with no small ad-
-vantage, and before I was apprized of his using
its, I gave the tincture combined with Nitre,
with the most decided benefit — I would try
to give 30 drops in the day, by it Nausea is ex
cited, the System is relieved & diaphoresis is
produced, which last effect has been injustly
denied by some; It is very usefull in ~~some~~
Rheumatism arising from suppressed lactation,
and I need not add, it is well adapted to the
disease when accompanied by dropsical swellings,
The Conium Maculatum is usefully employed
with a view to its sedative power, by the
agency of which, the irritability of the System
is soothed more certainly than by Opium,
which is objectionable when given with this in-
-tention on account of its stimulant effects.
The seeds of Stramonium, I am creditably
informed have been beneficially administered,

Arsenic, It is sometimes vain for us to attempt to cure the disease without recourse to this medicine, which is especially adapted to the acute forms, & the tendency of the Acute to the Chronic; but not at all to the latter; it is eminently suited to the disease, when it inclines to the intermittent type, when it attacks the loins and Muscles of the thorax. It preferable to the Cortex in the Intermittent shape (with the exception of Rheumatismes Scorbutus) because it can be given earlier than it would be allowable to use the Stimulant property of the Bark, If by the influence of this Medicine, the Oedema Arsenicale ensues we may be confident of its success - On the contrary if no beneficial effects appear in a few days, we may lay it aside, as it would be unnecessary to continue its use longer. This Article may be employed as soon as you choose, after bleeding and purging, in the

quantity of 5 drops of Fowlers Solution, three or four times a day as a Medicine dose, Bark is a Medicine much used in this complaint by the British physicians, who prescribe it, in the acute form; without the least regard to pyrexia or intermission, but it will be found only eminently advantageous in the Intermittent form, and when it approaches to the remittent form, Whereas in the more continued forms of the disease it will be found absolutely prejudicial; though even here it may be given in extremely small doses viz - 5 or 6 grains combined with Antimony or Ipecac:

The Hog weed has been reported to be of a great use in this disease, and may be given in powder or infusion, but I have never tried it.

Cucacuna, has been highly extolled in the Acute form, and when employed, should be given in the Watery Solution or Powder, The advocates for its efficacy, have given it in doses of 5 or 6 grains every 2 or 3 hours, during the day, Combined with Opium or Ipecac, with a view to its diaphoretic operation, which they say, it as certainly excites as Dover's powder, without the disadvantages of producing a constipation of the bowels, a consequence much to be guarded against in this disease, and one which is very apt to follow the use of Dovers powder.

I cannot however say as much of this remedy in the Acute forms of the complaint, and I am of opinion, that it should never be used, untill after one or two bleedings & purgings have been premised —

Mercury is prescribed with two views, to purge &

and to Salivate;
Calomel is recommended in the Chronic State by Professor Cullen; but in the United States, it is used to excite Salivation in all the stages of Acute Rheumatism in combination with other Medicines suited to remove the disease; and it is probable that it ought to be used more frequently, when we recollect that many Rheumatic affections arise from a Syphilitic taint, but I do not believe, that Mercury alone can ever cure, but it serves to prepare the System for the administration of other remedies, when salivation is thought fit, it should be excited by the blue pill, and must always be moderate, for if it be great, it will certainly exasperate all of the Symptoms. Blisters are remedies which have been much resorted to in Rheumatism, but they are improper when there

is much disposition in the pains to shift, because they promote the translation of the excitement in no small degree. They relieve pain, but are only necessary from the evacuation they produce, and consequently from this view Sinapisms are objectionable in the Acute, while they are very necessary agents in the Chronic Rheumatism.

Of the Cure of Chronic Rheumatism.

This, Professor Cullen says, depends upon an Atony of the Muscles & blood vessels of the parts, consequently he employed Stimulants both externally & internally and with very great propriety; and the best Medicine which I have ever prescribed here, is the Volatile Alkaline, which may be given both in substance and gummy solution, which last I prefer, The patient should take if convenient as much

as ℥j in 24 hours – Next to these, and indeed of little less importance, are the unbruised seeds of Mustard, it not only possesses the stimulant power of the former but joins with it, a laxative effect over the intestines; a benefit that cannot be more conveniently obtained by any other remedy. It should be given in the quantity of a table spoon full of the unbruised seed, once or twice in the course of the day; but the use of this Medicine alone, I have seen the most lamentable cases yield.

The volatile tincture of Guiacum is certainly a valuable remedy in this complaint, but I by no means accord with Dr. Dawson, in prescribing it in the Acute form of this disease and in the large doses which he used in the Chronic. The only form of the Acute in which I can conceive it to be beneficial is in the

intermittent type as a stimulant; the greatest dose of the Tincture which I have been able to use is ℥ss two or 3 times a day, and then the patient has been previously taken smaller doses. The Guiacum combines with its diaphoretic principle, a purgative effect on the bowels, and the tincture is now a favorite remedy among the Physicians of Philad^a both in this disease and palsy — I was once falling nearly into disrepute, from the circumstance of a patient who was using it, becoming paralytic under the hands of Dr Gregory of Edinburgh — The Doctor did not recollect the great tendency of Chronic Rheumatism to palsy; consequently all reproaches against it, were silenced and its credit soon again revived. The tincture of poke berries, or Phytolacca decandra is a medicine of almost equal

— virtues to the one just mentioned; like that it is stimulant, mildly purgative & diaphoretic, it is given in doses of a table spoon full 4, 5 or 6 times in the course of the day; Among the external remedies, which are used, are turpentine & camphor, and they are both remedies of considerable importance, but in acute Rheumatism or in any approximation towards that state, they are absolutely prejudicial, for though they relieve pain, they translate it to more important parts — Two cases of this kind I have seen, One in a boy, who rubbed Opodeldoc on his Ankles, for an inconsiderable pain died in an Epileptic paroxysm, Another in a gentleman who made use of the same application to his elbow, was seized with a paralysis of the tongue. But when there

is no evident tendency in the pains to shift from one joint to another, it is an invaluable remedy. With the same view, and in the same state of parts, we make use of the Vitriolic Unguent, composed of equal parts of Vitriolic Acid & Lard, as also frictions made with flannel and the dry hand, which is probably more effecacious than flannel. — In addition to the Remedies above taken notice of, I will add the Balsams of Tolu — ~~pa~~ peru, Copaiba & turpentine, all of which are very intimately allied to Guiacum and may be probably used with more advantage in some cases of Chronic Rheumatism, than that Medicine, for it should have been previously mentioned that the use of Vol: Tinct: of Guiacum is sometimes followed by painfull and troublesome hemorrhoids — The Turpentine is to be pre

scribed in the following manner.

℞ Ol: terebinthinatæ ℥j rub it down with a sufficient quantity of Gum. Arabic & Sugar, to which add of Aquæ puræ ℥iv of this mixture, give one desert spoon full ℥ or 4 times a day, by the agency of this Medicine, I have very often succeeded in very obstinate forms of the complaint.

The Soliquose and Alliaceous plants have been very successfully administered, particularly garlic —

The Tincture of Cantharides is a very effectual remedy, both in Chronic Rheumatism & palsy — The Tincture is preferable to the powder being less liable to produce strangurary, though this sometimes may be desireable. The Tincture is to be given in doses of 6 or 8 drops — 3 or 4 times a day

and gradually increased to 150 or more, if the patient will bear it, untill the disease is conquered.

Iron is also a very good medicine, and indeed is very effectual when combined with small doses of Capsicum.

Salivation in this stage may be advantageously resorted to, as well as change of climate & exercise if the patient can bear it. The Cold bath I have been afraid to employ, but the warm is a very usefull agent, and may be usefully employed.

Of Pneumonic Inflammation. *

This is thrown into this place because it is much less disposed, than Rheumatism, to the Intermittent type, and is most legitimately a phlegmasian affection. Under this head I shall include both Peripneumony & Pleurisy, for the causes as well as the

* Pyrexia, pain of the Thorax, difficult respiration, Cough —

the symptoms are so nearly allied, that it is difficult to distinguish them apart, and even though there should be any real difference, the method of treatment is nearly the same. Pneumonia Notha is distinguished from Pleurisy, from the fever being less violent, and the uneasiness attending being more a sensation of oppression than acute pain; by its being accompanied with some degree of Catarrh, and being most apt to attack persons in the decline of life. Spurious Pleurisy is known by soreness ~~of~~ to the touch, little cough and attended by little or no expectoration.

The fever attending this disease is for the most part of the inflammatory kind, especially when it arises from Cold & in dry situations. the fever even here is seldom of the continued kind, but mostly remittent. When on the contrary, it arises in damp grounds & from Marsh Miasma, the fever is mostly of the intermittent or remittent types, observing Tertian or Quotidian periods,

and sometimes at the beginning, it is of a Typhus type, it is sometimes translated from the Thorax to the abdomen, head & throat; when it is translated to the throat, it produces Angina.

Of the terminations, These may be either by re-solution or suppuration, forming a Vomica or abscess, the matter of which may be expectorated, pass into the Thorax, producing the disease of Empyema; or it may fall on the Diaphragm or Liver, produ-cing a disease, the Symptoms of which are nearly the same as those of Hepatitis, and lastly, it may pass into the cavity of the abdomen —

This discharge of matter may prove instantaneous-ly fatal, by suffocation — Pneumonia may also terminate by serous effusion, giving rise to Hy-drothorax, & by Gangrene, which is the most frequent consequence, when the disease arises from cold, though this tendency of the disease is sometimes epidemic, as is exemplified from the

putrid Pleuresies, which prevailed in Bristol Salem &c
Adhesions sometimes form between the pleura &
lungs, which are never any ways dangerous,
Ossifications of the Pulmonary Arteries - and Polypi
of the heart, have been seen upon dissections of those
who have died of this disease, The last arose prob
- ably from Carditis.

Of the predisposing causes. of these may be
mentioned the Male sex, laborious persons, persons
of hard rigid fibre, from the age of puberty to
middle age, those who have unsound Lungs from
previous disease, a Rheumatic habit, are probably
all predisposing causes to this disease, to which
may be added, a Malconformed chest; It is
less disposed to effect children, and is most apt
to occur in Winter & Spring.

Of the Occasional Causes. The sudden appli-
cation of Cold, when the body is heated, or depi-
litated, suppression of blood as in hemorrhoids,

or any other matter as the Leucorrhea in Women hard drinking, violent passions of the Mind, great indulgence in animal food, external injuries, great exertions of the organs of respiration, certain states of the Atmosphere, as in epidemic pleurisies, Metastasis from Gout; Angina, & Rheumatism, the former of which is peculiarly liable to be followed by a hemorrhagy of red blood.

<u>Of the Prognosis</u>, The following circumstances induce us to believe the disease dangerous, a violent Pyrexia, great difficulty of breathing, imperfect relief from the remedies employed; difficulty of breathing being increased or lessened according to the different positions of the body; is the one from which we are ~~apt~~ to apprehend the most danger, a very violent Cough attended with little or no expectoration, pain of a very acute kind or obtuse attended with great difficulty of breathing; the last of which I conceive more

dangerous than the former; tendency of pain to shift from one side to another, Delirium &c, which last is very common in Typhus Pneumonia — When it terminates fatally, says Dr Cullen, it is generally between the 3rd & 7th day, though it often suffers a remission between those periods which is fallacious, but if attended by an Erysipelatous inflammation, that remains fixed it is not apt to recur.

Of the Cure.

This Affection, like others of the inflammatory kind, requires the agency of the Antiphlogistic measures in the strictest degree; and the first and most important part of the cure, is blee-ding, which should be proportionate to the con-stitution and violence of the Symptoms, which are frequently so great as to call for the repetition of it 3 or 4 times in the 24 hours; but it some times happens that the sizy coat fails to be

our guide, appearing in the last stages when the system has taken on a Typhus ~~habit~~ action, till after several bleedings & sometimes even not through the whole course of the complaint; consequently we must be directed by the agency of other symptoms. The next most important measure, is purging; though Professor Cullen and others, object to this practice, from observing a spontaneous Diarrhoea in the commencement proving of no benefit, & rather a disadvantage to the Patient; But the Bowels must be kept open through the whole course of the disease, and the laxative medicines, such as Castor Oil, Senna &c. are absolutely indispensible & frequently indeed, in obstinate constipations, in bilious evacuations, I have resorted to Calomel, Rhenbarb, Jalap, Podophillum and with the happiest effects.

Blisters are of the greatest efficacy, and should be pretty generally applied, after one or two bleedings

and purgings, and should be suffered to remain on 10 or 12 hours, for though at Six there is a plentifull evacuation, yet at 12 there would be a much greater, and it is chiefly upon that principal that they act, but they can rarely remain as long as two days, from the circum-stance of their producing strangury, when they must be removed. It sometimes happens, when first applied, from their rubefacient effect, they increase the pain, but that soon passes off when they begin to evacuate. The most common and best place to apply them, is immediately over the pain, but when the symptoms are not urgent, and even then I apply them on the Wrists and between the Shoulders & elbow, with deci-ded advantage.

Sinapisms are not usefull in the Acute & Active forms of the disease, because they do not

evacuate, but may & should be applied in Typhus Pneumonia, where such stimuli are required. Opium cannot be used in the first stages without detriment to the patient, but when the inflammatory action of the system, is subdued by plentifull venesection & purging and when little else remains but an urgent cough, harrassing the sufferer and disturbing sleep, then Opium is an indispensible agent to relieve it; for it does not prevent, but only suspends expectoration, when after a while properly concocted, Mucus is thrown up, the best formula to be employed in this disease is the following, called also the brown mixture, of which a table spoonfull is to be taken every hour.

℞ — of Elixir Paregoric ℥j
Antimonial Wine — 30 to 150 gts
Powdered Gum Arabic } each ℥ij
Extract of Liquorice }
Boiling Water ——— ℥ viij — Mix this

Medicine should sweat too much, substitute in the place of antimonial Wine, the powdered Ipecac: I will further add, that in the preparation of the Paregoric, one half of the usual quantity of Camphor should be left out, and all of the Opium omisi.

Digitalis is another sedative Medicine which I have used with much advantage, often bleeding, purging & blistering, when there was still much action of the pulse, which required to be reduced, but which, from the constitution of the patient, and from other circumstances, it would not have been proper to have reduced by bleeding, I administer it in conjunction with Nitre, as I have previously mentioned under the head of Rheumatism; I also employ it in Pleurisy accompanied by dropsical effusion.

Expectorants are also very necessary measures, but they should not be resorted to, till the action of the Arterial System has been reduced, by Venesection, Blistering and Purging and then their utility is doubtfull.

The kind which I would recommend are the following, viz – Small doses of Ipecac: combined with small portions of Calomel or Opium; Also the blue Pill in the dose of 1 gr. night & morning, and Kermes Mineral. When the Cough is violent, the inhalation of the steam of hot water, either alone or combined with a small portion of Æther, is of much importance, to promote expectoration; with the same view, some of the Narcotic Medicines are sometimes used; as hemlock &c – with much propriety.

Of Senaka, lately much has been said of this; but in the active Pleurisy arising from cold

it cannot be used, untill the action of the Sys-
-tem has been much reduced, when it will be
found an invaluable Medicine; but when
it arises in Marshy grounds, Seneka may be
used much earlier than in the former case;
In typhus Pneumonia it is highly usefull.
Salivation is highly useful when the force
of the disease has subsided and when slight
pain, fever &c- still remain, & especially after
the bursting of a Vomica, it should be ex-
-cited by Calomel-
Diet should be light, as; Sago, tapioca,
rice &c- but Milk is forbidden on account
of its affording too much nourishment
to the System & exciting fever; but Rennet whey
is a very valuable article, & the various diff-
-ent drinks are to be used, which may be
acidulated by Cream of Tartar, Lemon juice &c

The Bed clothes should be few, and the temperature of the room, says Dr Cullen, should never be above 60 degrees, But the habits &c of the patient must be taken into view, for we rarely meet with a case of a person who has been accustomed to a hot stove, able to bear this temperature.

Bark is a very necessary Medicine, and indeed it cannot be dispensed with in Intermittent Pleurisies, though it is often necessary to bleed before the administration, The time for given it, is, in the intervals of the Paroxysm of the pneumonic fever. This occurs in Marshy grounds, is much more obstinate than genuine pleurisy, and is known by the fever coming on with a more lasting & violent chill, Nausea and sometimes a vomiting of

bilious matter -

Of its efficacy in Typhus Pleurisy I have previ-
-ously spoken. and in the Inflammatory
Intermittents arsenic promises much,
when we think of its Modus Operandi, & its
great superiority in Phthisis Pulmonalis.

Emetics are never to be resorted to, in the
genuine pneumonica from cold, but in the
typhus pleurisy, they form the chief basis of
our remedies, and here they must not be violent
in their operation - a moderate dose of Ipecac: or
Antimony will serve.

Camphor in the typhus form of this disease
has been highly extolled by Dr. Parker of vir-
-ginia, though I have never prescribed it,
yet, I have no doubt of its efficacy.

The Volatile Alkali, is the medicine which

I commonly employ, in this state of the complaint, and which answers as well as any other; In the typhus pneumonia which was epidemic in many parts of the United States, the Serpentaria Virginiana was successfully employed by many Physicians and was sometimes carried so far as to puke.

I have now finished what I had to say respecting pheumonic inflammation; and it is probably necessary that I should add something respecting Carditis, Pericarditis, and Paraphreritis - but there is no precise symptoms which can, in any degree, enable us to distinguish them, for the palpitation and Syncope supposed to designate the former, and the violent delirium and Risus Sardonicus supposed particularly to mark the last, are very fallacious, and it is by no means

absolutely necessary that we should be acquainted with the pathognomic symptoms of each, since the remedies to be adopted are precisely the same, only requiring the more liberal employment of the antiphlogistic plan, in the latter & particularly bleeding.

Of Quinsy. (*)

Of this professor Cullen, has 5 distinct species viz Cynanche Tonsillaris, Pharyngaea, Parotidea, maligna, & Trachealis; but they are all of them so intimately allied, that I shall not speak of them under a different section, being genuine phlegmasiæ and requiring the antiphlogistic regimen to be employed; Thus, for the two first,

(*) Pyrexia, sometimes of the ardent kind, redness & pain of the fauces, Deglutition & Respiration difficult, lightness of the fauces, (Cullen)

first, all that is necessary, is bleeding, purging blistering, and the topical application of astringent gargles, of which, none answers better, than the decoction of Oak Bark and Allum, Cynanche Tonsillaris, as an inflammation of the mucous congeries of the tonsels occurring chiefly in the Young and Sanguinous, which inflammation may spread to the fauces producing Cynanche Pharyngea, for this last is rarely an idiopathic disease, unless it be occasioned by the swallowing of some acrid substance.

The other affections are of much more importance and therefore requires seperate consideration and First

Of Cynanche Parotidea.

see over leaf

This consists in an inflammatory affection

of the parotid and Maxillary glands, and the adjoining tela cellulosa, accompanied by pain and swelling which is sometimes so great as affect materially (contrary to Dr. Cullens definition of the disease) the function of respiration; when the violence of the complaint is great, the fever runs high, the faces become florid and is affected with a kind of erysipelatous inflammation; when the process of Nature is not interrupted, the violence of the disease abates and the fever is terminated by a spontaneous effusion of moisture from the affected parts, attended by a

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* over leaf page 237 Great external swelling of the parotid & maxillary glands, respiration and deglutition little impeded, Synochea in general slow. (Cullen)

by a general and moderate diaphoresis; But it sometimes happens, at this period of the disease when swelling of the fauces subsides, that the mor and pain attacks the testicles, which when it terminates favourably is, as before, by an effusion of moisture on the scrotum, though when this does not take place, violent delirium may supervene and death be the consequence; or the testicle be absorbed leaving only a feeble nucleus of the original, * leaving the patient com pletely

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* The following circumstance of Genl. Washington which if true, may serve in some measure to account for his never having had Children,

Dr Shippen being at a table, where Genl. Washington also was, the former gentleman was asked concerning the health of the City when he

~~practice~~ patient completely incapacitated from the power of procreating. At the same time as in Men, the breasts of the very young female is affected, though reasoning from analogy, I respect the ovaria are much oftener the subjects of the Metastasis in Women, occasioning sterility.

It is generally an Epidemic complaint seldom sporadic and never contagious, it occurs principally in the Winter & Spring and may

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when he answered it was very good, there being nothing but Mumps in the town — to this Genl. Washington replied to a Gentm. sitting next him, that the Dr. made too light of Mumps, for that he once had it, but had never recovered from its effects.

and may be assumed as an axiom, that it never attacks the system but once, which circumstance plainly proves the specific nature of the complaint.

Of the Cure.

This disease rarely requires much bleeding or purging in the incipient stage, for it is apt to run into a typhus state, and the most important measures we can adopt, is to apply a large blister over the whole of the tumified parts, when the pain and tumefaction are so considerable as to require our attention, for by being thus applied, it will certainly mitigate the violence of morbid action, and probably prevent the translation of the disease to the testicles; but when they become affected and delirium supervenes from an absence of swelling in them, Dr Cullen suggests the pro-

propriety of warm fomentations, or by blee-ding, blistering, vomiting &c to obviate the consequences of its absence.

When it takes on the Typhus state the best cordial is Wine, and the Volatile Alkali is a remedy of the greatest importance.

* — Cynanche Trachealis, vulgarly called Croup and sometimes Hives, distinct from from the erysipelatous affection of the skin, sometimes so called, It is an inflammatory affection of the Trachea attended with great difficulty of respiration, croaking voice, and whizzing inspiration, accompanied by a tightness and straightness of the chest & fever

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* Difficult respiration, inspiration loud, voice hoarse, cough sharp; little swelling of the fauces deglutition easy, Synocha (Cullen)

and fever often of the highest grade, though I have known it to be of an intermittent form, observing tertian & quotidian periods, it is a disease most common to children, but rarely attacks them untill after they are weaned, & above that period, the younger they are the more liable they are to it — But Dr. Cullen errs, when he says that persons above the age of twelve, are never affected by it, for several facts are on record, and several facts are within my knowledge, where adults have been attacked by it, and it was to this disease, that the illustrious Washington fell a victim.

The period of duration is very various, sometimes lasting 4 or 5 days, which is more especially the case when the disease comes in with the ordinary symptoms of Catarrh, which is by no means uncommon, but frequently again, it

it finishes the catastrophe within 24 hours after the attack — It is not contagious though it may rise from the same causes as those that produce epidemic diseases, as was the case after Yellow Fever in the year 97 —

I do not accord with Dr Rush in believing there may be a spasmodic Croup; but, nevertheless I know that there may be an Idiopathic one, such as I have described, and a symptomatic one arising from a sore throat (ulcerated) which from this cause may be extremely & unexpected, It is more obstinate and difficult of cure than the genuine Cynanche Tonsillaris.

A membrane is sometimes formed in inflammatory croup, which may be sep-erated from the bilious tunic of the trachea;

though this seldom occurs, it being more often an exudation from inflammation than the formation of any distinct substance of a membranous structure.

Of the predisposing causes.

The chief of these is a moist atmosphere, hence its frequency in damp, sea port towns, Measles and Pertussis may also be reckoned among them.

Of the remote Causes.

Cold, and Marsh Miasma, which last is undoubtedly so, the former does certainly sometimes produce the disease, but I am inclined to believe that it more often depends upon a peculiar state of the Atmosphere. This fact I saw strongly illustrated during, or a little after the prevalence of the yellow fever, when many were affected with

a genuine Cynanche Trachealis, accompanied sometimes with a yellow skin & in one case with the black vomit — Sometimes the disease is a mere metastasis of pneumonic ~~aff~~ inflammation producing the pneumonia trachealis of Darwin.

Worms are sometimes an exciting cause of this complaint, particularly the round worm from travelling up into the oesophagus & producing inflammation and irritation of the surrounding parts, and genuine Cynanche Trachealis, one case of which I have distinctly seen in asmuch as the patient was not relieved, till the discharge of those worms by the use of an Emetic, And Dr. informs us of Ascarides producing the same affection.

Of the Cure.

Bleeding is the first, one of the most important and one of the greatest remedies in this disease, and for a history of its efficacy I refer you to Dr Dick's excellent treatise, a resident of Alexandria in Virginia, whose practice was to bleed, particulary in recent cases almost "ad deliquium accerni." Dr Hillary of Barbadoes and Dr Ferrier of England coincide in opinion as to its efficacy, and hence it being a remedy in all climates, in which the complaint appears, there can be little doubt of its absolute propriety, though I have often seen the complaint yield without detracting a drop of blood. For local depletion, leeches have been recommended and sometimes, no doubt attended with good effects, though they are slow, troublesome, painfull, & subject the patient

to catching cold, Scarifications have likewise been recommended.

Blisters are highly valuable applied before the trachea, and sometimes behind the neck and ears, in genuine Cynanche, but in the peripneumonia Trachealis they are most successfully applied in the Sternum.

Sinapisms, are however, much more effectual in dangerous cases on account of the promptness of their action, which we obtain in less than 50 Minutes, when we may remove them and apply Blisters, if we wish an evacuation — I need not add, that by their previous application, the evacuating effects of blistering is generally accelerated.

Emetics are remedies which cannot be dispensed with, in the treatment of this

disease, though in violent cases, it is frequently necessary to bleed, and even blister before administering them; Of these a variety has been employed, but in common practice, I make use of the powder of Ipecac - and sometimes though not often the Wine of Ipecac: there seems indeed to be something specific in the operation of this Medicine, but to be effectual the dose should be large, about 4 grains to a child 2 years old; I have frequently combined it with calomel, and with decided advantage -

Tartar Emetic is also very valuable and of late the Antimonial Wine, is now very generally used, and with great success, though I am not so partial to this, as the dose is unmanageable.

Where

Where a prompt and expeditious operation is requisite, none promise more certainly to effect that, than Tupith Mineral; it is a Medicine which I strenuously recom-
-mend to you, for it is attended with no kind of danger, and like Ipecac: it is thrown up, almost at the first Vomit and does not linger in the Stomach like preparations of Antimony — To a child 3 years old, the dose is generally 3 gr. I frequently give it combined with Ipecac: The corrosive sublimate of Mercury, has been successfully employed by the Physicians of Maryland, in a Watery Solution. though I have never used it, Yet I can rely on their testimony. ——

Blue Vitriol, by means of the suddenness

of its operation, is a very valuable remedy in violent and dangerous cases, it ought to be prescribed in broken doses, in solution untill it proves Emetic.

The infusion of Mustard, I have often prescribed successfully, so as ~~to take~~ puke, when the violence of the disease has not been great; And I have ~~been~~ often cut short the violence of the disease, or rather prevented the formation of it, by a tea spoonfull of recently prepared Mustard, for if it be of long standing, its acrimony would be apt to produce strangulation.

Calomel, is a medicine of the first importance in this complaint, and in my practice, after an Emetic, I generally prescribe this; It is employed by Physicians, to puke, salivate, purge, and promote

expectoration: not much benefit can arise from an attempt to salivate by it, because I do not recollect, ever to have a case where Ptyalism was excited among Children in this disease, and only once in Adults. But it is probable, that by increasing the secretion from the faucks, and abstracting morbid excitement from the trachea, It may thereby contribute to relieve the affection; Much more is to be expected from it, when it purges, pukes, and proves expectorant; but to be of service, it must be given in large doses, I frequently give it combined with Ipecac: when its efficacy is improved. Some Physicians have given it in doses of 30 grs. or 40 or 50 in the 24 hours to a child 3 years old, but this is certainly too much.

The

The Polygala Seneka is a very excellent remedy, but in general it is necessary to breake the force of the disease, by bleeding and an Emetic, when its expectorant power will be more readily produced, but when the complaint is not of the highest grade, I have several times cured it by the agency of this remedy alone prescribed in the form of a strong infusion, the acrimony of which may be recovered by honey; but if it purges, its efficacy is much diminished.

The Sanguinaria Canadensis has been much recommended by Drs. Gregg and Smith on account of its expectorant qualities — its sensible properties are very much the same with those of the Seneka.

The asafoetida, in the form of the watery solution, on account of its expectorant properties, has been spoken of as being usefull in the

Idiopathic, but more especially in the Symptomatic Cynanche Trachealis, and indeed in the former — I have successfully prescribed it, though it was not untill after other remedies have failed. It may be exhibited both by the mouth and in the form of an Enema.

Indigo. In Culpepper County Virginia, this has been used with unusual success, as a domestic Medicine, of its Modus Operandi I am entirely ignorant. The French have properly advised the inspiration of the steams of hot water, impregnated with vitriolic Ether, with a view to promote expectoration, though this must not be prescribed untill the energy of the disease has been subdued by proper measures; and in this state, but particularly in strong convalescents from the affection, strong Coffee may be very advantageously used, as it is both an

agreeable Stimulus and promotes expectoration in a manifest degree. As to the propriety of Bronchotomy I say nothing.

Cynanche Maligna, or Scarlatina Anginosa

These are precisely the same, though Professor Cullen, consider them different; the patient first feels languid, with the ordinary symptoms of fever, which is soon formed, and on the second day of the fever the throat become slightly sore & the neck stiff, on the morning of the third day the body is covered with a scarlet tinge, or more properly the colour of a boiled lobster; this colour is not owing to the formation of any pimples or eruptions, for the skin feels perfectly smooth to the touch & when pressed upon, the redness disappears, but returns on removing the pressure. With this Scarlet colour there is some tumefaction of the body or parts in which the blotches or

redness are most perceptable; if the patient lives till the 6th day, then the scarlet hue of the skin becomes brown, and the cuticle peals off in scales, and nearly at the same time, the tume faction subsides, the pulse is small, quick & feeble, the Urine is discharged in small quantities, as if to lay the foundation of succeeding Anasarca, which comes on about the 15th day, if the disease lasts so long; in the mean time and soon after the appearance of the complaint, the fauces become affected with ash coloured spots, that soon become deep seated Ulcers, the Matter of which sometimes spreads into the neighbouring parts, particularly in the trachea, producing symptomatic Trache-alis, of which we previously spoke, and sometimes into the Nose, producing Coryza, and also into the Alimentary Canal producing dangerous Diar-hoea, the parotid & other neighbouring glands are also

much affected. The violence of the disease, is often so great, as to cut off the patient on the 3d day.

This complaint is more apt to occur in Children than in Adults, and such is its similarity to some other diseases, that it is often difficult to distinguish them apart, frequently impossible, thus it may be confounded with Typhus Petechialis, but here the spots are more especially confined to the neck, back &c— It may be distinguished from the Purpurea, purple fever, or red gum of Childn by the pustules, being prominent in this last disease, appearing late and not loosing their colour upon pressure; in Measles the pustles rise above the surface and appear a little later than in Anginosa, and in Erysipelas, the redness is less extended over the body.

There is no febrile disease in which the skin is more preternaturally hot than in this, and such

is its great resemblance to Measles, that it has been ~~recovered~~ considered by many authors, as only a variety of that complaint, and denominated putrid measles, but there is no such disease, The Scarlatina Simplex of Sydenham is also the Anginosa. De Hoen has seen them both raging at the same time, at Vienna, at the same place and at the same time in the same family. so that there is little doubt that the Simplex, The Anginosa and the Cynanche Maligna are one and the same disease, produced by the same contagion, the nature of which we are entirely unacquainted with. That this disease is contageous, or may be communicated by touch or vicinity to the diseased person, in which sense I use the term contagion, & not in any peculiar state of the Atmosphere, Most Physicians are agreed, though I think I have known

it owe its origin, more than once to a newly white washed house, moist boards, and other circumstances connected with the white wash, that may produce it.

However many facts prove its contageous nature; it may be taken from inhaling the breath of the patients, which is here intolerably foeted. & Dr. Willan informs us, that Physicians, who are the chief victims of the disease, in examining the fauces of the patients, have a sensation communicated to the tongue from the effluvia of the diseased parts, similar to that of green vitriol, occasioning an increased flow of Saliva, sometimes Nausea & even vomiting.

Of the Cure.

In the treatment of this affection, I shall consider first – The Scarlatina Simplex in which there is no disease of the fauces – 2ndly The anginosa, in which the fauces are not so much affected

as to endanger life, 3d. the Cymanche Maligna in which the ulceration of those parts is very considerable, and attended with great danger to the patient —

And first of the Simplex — Dr. Sydenham has very correctly observed, that here the life of the patient is in no kind of danger, untill he gets into the hands of the Physician; for the over officious practitioner is very apt to do, too much, It requires but little medical aid, for the disease often runs its course without any remedy and with but little inconvenience to the patient, The most that is necessary is, for the patient to be plentifully supplied with cool air, to live entirely upon a vegetable diet, & to enjoin cleanliness, the best remedy necessary is Wine, and sometimes it may be necessary to prescribe a Saline Cathartic.

Scarlatina Anginosa, Bleeding in this disease is sometimes necessary, though it is not in general indicated and should be prescribed with caution, Purgatives are likewise, but seldom required; the bowels being more regular in this, than in any other febrile affection, but I have had occasion to prescribe Calomel & Rhubarb here, with manifestly good effects, though we should be nice in prescribing them. - - - - Emetics are likewise very important agents here; and so indispensible did Dr Rush conceive them, that he never visited a patient without prescribing them, and frequently joined a portion of Calomel with a view to their operation on the bowels - Withering speaks highly of them, and he commonly administered tartarized antimony combined with a small portion of Ipecac: so as to make a strong impression on the System - I generally use the Ipecac: & sometimes the Ferpeth mineral, especially when we

want a quick operation, as in dangerous cases — It is probable that the blue vitriol might be used with advantage.

Blisters, The Physicians of America, have found of great utility, and I have used them with no small advantage to the patient; they may be laid on the throat and back of the neck.

To allay the inordinate heat of the skin, the cold bath would naturally be suggested, and according to Dr Currie of Liverpool has advised it, When in the hight of the Scarlet efflorescence, great heat and dry skin, nothing has been found more eminently successfull than sponging the body 12 or 15 times a day, with vinegar & Water, which very generally allays the heat, brings on Diaphoresis and a ~~refter~~ refreshing sleep — Dr. Willan recommends the oxy muriatic Acid, but I have never tried it; his dose both for Adults & Children is entirely too great, being 40 drops for the

former, and ten for the latter, and in fact acidulated their drink with it. We should not begin with more than ¼ of that quantity —

The Vitriolic Acid may be used more liberally and Children take it very readily; it should be given in Rose Water;

The Dropsy which takes place in this disease, necessarily requires the use of Diuretics, and accordingly Dr. Willan has advised the use of the Vegetable fixed Alkali with much advantage to his patients thus circumstanced.

Dr. Thatcher also speaks of the use of Digitalis in this complaint, though I should not like to try it.

Cynanche Maligna, is much the most formidable; and what we shall relative to it shall also apply to Cynanche Trachealis Symptomatica.

Bleeding wether general or local, is to be entirely rejected for even local depletion in this disease

has caused the pulse to sink forever.

Purging is absolutely to be abstained from for the same reasons — Emetics, however are valuable agents here, and cannot be well dispensed with; And in all states of this affection the inhalation of the steams of vinegar impregnated with Myrrh have been found eminently usefull, and also the inspiration of Sulphuric Acid poured upon burning Coals, has been found by Dr the best means for cleaning the foul Ulcers of the throat & preparing them for a proper digestion.

Dr. Withering is of opinion that the Cortex Peruvianus is of but little utility in this complaint, but the experience of Wall and almost all other Physicians give the negative to his position, and indeed it is a remedy of the utmost importance —

Blisters — Dr Withering has found totally inadequate to the cure of the Complaint, and indeed he has found them injurious.

Myrrh dissolved in Vinegar, has been found of universal advantage — And in the West Indies the Capsicum I am informed has been administered with unusual success in the following manner: ℞ Capsicum 3 table spoonsfull — Common Salt ℥ Ditto — made into a paste by being first heated, and then add to it 1 pint of Vinegar, of which Mixture, a table spoonfull is a dose for an Adult.

The Volatile Alkali has been employed by Dr Beart with considerable advantage in the following manner — Dissolve of Vol: Alk: ℥ij in ℥v of water, of which give One or two table spoonsfull every 2 hours, — And thus administered he found it one of the most successfull remedies to relieve Delirium, Fever, and the inordinate heat of the Skin, which constantly attends this complaint.

Antiseptic Gargles. — when the patient can use them, are of much importance, and are composed of

Bark, Myrrh, the vitriolic Acid, and also the other animal Acids, The Astringent Gargles are likewise employed & Dr. of New York has found the decoction of White Oak Bark. Sumach and a small portion of Alum is of eminent utility, it therefore deserves a trial. The decoction of Serpentaria, given internally in this complaint, is also greatly celebrated.

Of Measles.

Rubeola is the name given to this disease by Savages and it is one which I shall adopt.

Eruptions

Cullen defines, Exanthemata; contageous, attacking a person only once during life; fever at definite times eruptions, often numerous & small, take place on the skin;

Measles, infectious, inflammatory fever, sneezing, a flow of humour from the eyes, dry and hoarse cough. (Cullen)

Eruption is a necessary character of this disease, it is therefore properly placed by Cullen in his order exanthemata; which however is not the case with Anginia; as efflorescence is not a necessary character in it.

Dr. Cullen defines this, a contagious, inflammatory disease, attended by sneezing, a watery flux from the nose & eyes, and attended also by a Cough — On the 4th day or a little later (he should have said earlier) there occurs over the whole body, especially, in the first place, on the face a number of papulæ or spots which quickly run into clusters and are sensible to the touch; in 4 or 5 days afterwards this medly eruption disappears by a desquamation of the Cuticle. For an accurate history of its phenomena, I refer you to Dr. Cullen's first lines, The eruption often appears on the 2nd day, more frequently on the 3d and there is generally a full crop of papulæ on the 4th

There seems some peculiar disposition to this disease, for it will sometimes attack 5 or 6 Childn. of the same family while the 7th. Will escape; though at some future period it is liable to the complaint — It is less dangerous and less apt to produce abortion in Women than the small pox, and indeed, it seems that they can take it without any hazard of such an issue, It has been observed in England that measles may occur without any catarrhal affection which circumstance however does not prevent the patient from any other future attack, It is a fact worthy of remark, that Childn. affected with this disease in the Spring are subject to a Cholera in the subsequent one, while Adults are liable to Dysentery — The fever attending Measles is generally very violent immediately before the eruption, but then, sometimes, though extreemely seldom abates, or ceases altogether; It is more apt to continue in an increased degree untill the mealy disquamation comes on, and even then

it is not unfrequently continued for a long time after &c
is attended by a Cough.

Measles may lay the foundation of Phthisis Pulmonalis
it is often followed by Chronic hoarseness & Opthalmia
It is believed by many, that small pox and Measles
may exist at the same time, in the same subject
and is then termed by Nosologists Rubeola Variola,
I am far from not believing this fact - for Dr. McBride
has informed us that he has seen both diseases dis-
tinctly marked in Child.n who had been previously
~~Attacked~~ innoculated with variolous matter and
afterwards were evidently affected by both of
the complaints.

Of the Prognosis,

A mild Diarrhoea, a moist skin, and even a
tolerably copious sweat towards the end of the
disease, copious discharges of Urine, a free

expectoration, or hemorrhagy from the nose, when the head and eyes are much affected, are deemed favour-able, whereas a copious Diarrhea, a tendency to Pneumonic inflammation, profuse sweats, a change of the eruption, from a red to a livid hue, petechial spots, suppression of the eruption, more especially when that be followed by violent pain in the head, & pneumonic inflammation are considered unfavourable appearances.

Of the Cure.

This being a disease of a highly inflammatory nature - a regular adherence to the Antiphlogistic plan is indispensible - and among the first and most important remedies, is bleeding at any stage of the complaint if circumstances authorize it; both before and during the eruption, and before and frequently after the des-

-gamation. It is particularly necessary, where from the delicacy of the habit, narrowness of the chest, and catarrhal affection, which always attends it, and where there is a predisposition to Phthisis, to employ the lancet liberally in the early stage, when other symptoms do not indicate the contrary course, and in short, whenever the heat is great, pulse full, together with pain in the head & side, & Dyspnoea V. S. must be employed. No matter at what time these symptoms appear, for frequently the violence of the complaint is suspended for some time; and indeed, we may receive it as an axiom, that it is as necessary to bleed here as in Pleurisy. The Cough is to be treated by demulcents & Opium, but with regard to the ~~latter~~ last, there is more caution necessary, when the inflammatory diathesis is considerable, when there is much

dyspnoea and symptoms indicating pneumonic inflammation it cannot be used; but under opposite circumstances it must be employed, for it is the only remedy to allay the Cough, and when thought necessary the Brown Mixture is the form in which I employ this Medicine. A Tea made of Mullen, & also a Tea made of the Butter wood tree of Virgin.a are effectual remedies in quieting the Cough, the latter contains much mucilage & Anodyne property.

Blisters are very important remedies, and what we have said relative to their use in Pneumonia is applicable here; they may be applied on the Chest and on the upper arm; they are also the most usefull remedies for the Opthalmia consequents to Measles.

Purges are not required, for there is for the most parts a diarrhoea constantly attending

the complaint, and all that is necessary, are mild laxatives, and drastics are to be studiously avoided, as they might be productive of serious injury. It has been thought from the Analogy between Measles and small pox, that cold air might be as effectually made use of in the former, as in the latter disease; but air that is too cool might occasion a suppression of the eruption which might be followed by dangerous consequences. In the U States therefore, Physicians agree that a moderate temperature is proper, and a mild cool air is all that is necessary. Children sometimes previous to the eruption, are seized with a convulsion which is to be relieved by Laudanum & Sinapisms, and when the inflammatory symptoms run high, by bleeding and by all means avoiding cold air.

The hoarseness, which is a Sequala of Measles, & sometimes approximating almost to a total loss of voice, requires our attention – demulcents & purging have both been ineffectually employed; but the cortex Peruvianus has been more succesfully employed, as also opium, but I have found the bol: Alkali: a more certain & efficacious remedy than any other I have ever employed besides, for I have relieved cases, where there was almost a total loss of voice by the use of this medicine alone. It is possessed of expectorant virtues, that do not belong to any other two Articles – I neglected to mention that Measles sometimes occur without any eruption, or rather that a fever following the same course, and attended with the other Symptoms of this affection, sometimes attacks persons while Measles are epidemic, having its origin from the

same cause that produces this disease.

Measles may be communicated by inoculation, which was first proposed by Dr. F. Home of Edinburgh who practised it for many years before his death, and gives his testimony in favour of it, though I believe no good effect has resulted from it. It may be communicated by incerting a lancete into the Skin of the patiente, when the eruption is the greatest, so as to obtain a little of the blood, a small piece of Cattan is to be moistened with it, and incerted into a similar incesion made in the arm of the healthy patiente, or it may be contracted by inoculating with the water from the eyes and Nose of the diseased patient, as also from the brauny Scales & Saliva.

The fever which follows the inoculation comes on about the 6 or 7th day — as in variolous inoculation, but when exposed to contagion,

(as in small pox) it does not come on till the 11th. I deem it indispensibly necessary previous to the inoculation, that the body should be properly prepared (as in small pox) in order that the violence of the disease might be lessened, though a difference of opinion has prevailed among other men.

Of Hepatitis. see opposite page *

The acute form of Hepatitis, Dr Cullen describes, an inflammation of the liver, accompanied with Synocha (which is frequently intermittent) and pains sometimes of the acute, but more often of the obtuse kind, in the right hypochondrium (which frequently extends up to the Clavicle & shoulder of the side affected - There often occurs dyspnoea, Cough and other phenomena which lead us to confound the disease with Pleurisy, the pain frequently attacks the left side, instead of

the right which renders our diagnosis difficult & almost impossible, — Women I think, are more subject to it than men, though the last from intemperance are much more subject to a Schirrous liver — This disease may be very properly divided into Idiopathic and Symptomatic, or such as originate from other complaints, and the last I think are by far the most prevalent & frequent.

Remote Causes, though in general, difficult to be understood, arise evidently from the same causes as Rheumatism, Fever, Dysentery, &c — Cold is more apt to give rise to it, when it act so as to suppress perspiration, & that Marsh Miasmata

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* Pyrexia, tension & pain of the right Hypochondrium, sometimes pungent, but often dull pain of the right side; pain on lying on the left side, difficult respiration, dry Cough, Vomiting, Hiccup: (Cullen)

Miasmata is a cause we all know, from the fever attending, being of the intermitting form, and from the disease occurring more frequently in those parts of the United States where Miasma exerts its greatest influence on the System; It is common in the South of Asia, & Bornes where diseases which have their origin from Marsh effluvia prevails. A fracture of the Cranium sometimes produces it, and it occasionally occurs in the Hydrocephalus Internus of Children owing to the Sympathy between the brain and that viscus; and I am very confident it may arise from the translation of acute gout, and indeed, I have been once affected with it, from that cause my self — It terminates like other inflammations in resolution, suppuration, and gangrene, though the last is extreemely uncommon, the matter collected may be

discharged by the beliary ducts, into the intestines, and into the cavity of the Abdomen, it may form a tumour & burst externally; It may make its way through the Diaphragm and be coughed up, It has also been said to have made its way into the pericardium, and also into the Cava and discharged by the Urine, these two last routes are very unusual;

When it terminates by resolution, it is generally from some known evacuation as hemorrhagy from the Nose in the young and by hemorrhoids in the old — bilious evacuations, sometimes by a profuse Sweat, and a large discharge of Urine.

Of the Cure.

This like others of the Phlegmasia, require the antiphlogistic plan, and among the most im-

portant

important is blood letting, which must be large and frequently repeated – according to the urgency of the symptoms – and when V.S. cannot be employed and at all times, topical bleeding with leeches & cups is very usefull –

Blisters are of the greatest Utility, and indeed, the disease cannot be cured without them well, They must be large, and extending entirely over the seat of pain and must be repeated often – We cannot expect any thing from rubefacient effects, and it is from the evacuation effect alone, that we rely.

Issues made by Caustic are also much used, but all advantages resulting from them, may be obtained from Blisters; Warm fomentations are also of much advantage –

Purging is of the first importance and we are

led to its use from the circumstance that Diarrhoea so often proves a cure for the disease, drastic purges, are not to be preferred, it is the mild kind which should be administered and often repeated, such as Ol: Ricini, Sal Glauber, Sennae &c though I have several times made use of Calomel joined with Rhubarb with the happiest effect, and when purging cannot be much resorted to, particularly under a mercurial course — the frequent use of large Enemata to relieve the acrid contents of the Intestines is of the first importance.

The Digitalis I have used in combination with Nitre, and commonly give it so, as to produce Nausea, the great advantage resulting from the use of Mercury in the complaint, so as to produce a slight Ptyalism, is now well attested by Physicians of all climates, the energy of the

disease must, in some measure be lessened by the previous venesection, blistering & purging before resorting to the use of Mercury; It will sometimes happen that one course of Mercury will be of no service to the patient, but if re-peated it will shew itself to be of the greatest advantage to the patient, but if repeated it will shew itself to be of the greatest advantage to the patient, two cases of this kind I have seen in Women who came from the W. Indies — To excite the salivation, Calomel with Opium, blue pill and inunction may be used —

The Nitric Acid has of late become of great celebrity among the Physicians of this City in the cure of Hepatitis, I never employed it, but in one case, which is now in the hospital, to whom I gave up-wards of 50 or 60 drops in the course of the 24 hours, The patient seems to be improving under its use,

and the testimony of other Physicians whose experience have enabled them to judge further of its utility should induce us to make trial of it.

When the complaint is attended by a fever of the Intermittent kind, The Bark and Arsenic should be resorted to during the intervals, though it will be still necessary, to draw blood ℥ during the paroxysms, if circumstances require it, The Arsenic I found last Spring, to be a remedy of the greatest importance in several cases in which I employed it,

Chronic Hepatitis is to be cured by Blisters, Purging; Sinapisms, which are not used in the acute form, & a slight mercurial course. I have frequently employed the Bol: Alkali: and Bol: Tincture of Guiacum and cured, when all other remedies failed, I may here subjoin, that the Liver sometimes bursts, and Mortal hemorrhagy supervenes.

Splenitis is a disease I know nothing of, and indeed

there are but two cases recorded of its existence, it is however of an inflammatory affection of the Spleen, attended by Synocha, pain in the left hypochondrium and tumour, which sometimes suppurates – It is to be treated by the same reme-dies which are made use of in Hepatites,