2 vols.

Early 19th Century
Medical Manuscript

Practice of Physic
Authorship unknown
[n.d., ca. 1800?]
2 vols., all in one hand

$625

Fascinating document covering a wide range of diseases, disorders and conditions, including pregnancy, typhus, gastritis, epilepsy, gangrene, syphilis, hepatitis, neuroses, tetanus and much, much more!

It deals with epidemiology, diagnosis, treatment and prognosis; and cites some of the great medical minds of the 15th - 18th centuries including Rush, Sauvage de Lacroix, Fothergill, and Lommius.

x

x

x

x

x

2 vols.

Disease, a deviation from the perfect or healthy state of the body. But every deviation does not form a disease. To constitute a D. the deviation from sound state must impede some of the functions, or give pain or change the appearance of the part affected.

Systematics have given several deviations from ordinary state as D. which surely ought not to be called Diseases – Sauvage & Sagar call Pregnancy a D. & give a definition of it. its cause, appearance, & termination – Nothing can be imagined more idle; for Pregnancy certainly a function of the healthy body. Tho it may occasion disease, it certainly is not itself one.

Sauvage's first genus is Vitia, & amongst these is classed Pimples – Every pimple a phlegmon & exhibits all the Phenom. of Phleg. but in so small a degree as not to deserve being called Disease – freckles, white spots on nails, thinness of Beard, shortness of prepuce, early greyness of hair – all arranged in this class, the most

imperfectly. See also Boyd—

In order to judge of D. must have notion of functions of body in healthy state. These differ according to age, sex, temperament. & to know the deranged state in any individual, must have previous knowledge of healthy state of functions in that individual.

Must know names by wh. D. distinguished in order to be acquainted w. symptoms. The Sy. are various & variously combined. & according to their singular appearance, their succession or their combination the Disease is arranged, & denominated.

The whole variety of sympt. & morbid Phenom. may be arranged into Impeded functions—painful sensations, & change of sensible qualities. The anim. natural & vital functions may all be deranged. Thus any of our senses may become too dull or be lost, it may be too acute, or it may become imperfect & depraved. Sight for instance may be dim or lost, may be so acute that exercise of

painful - may give wrong notices as exhibiting only half of object, or showing it inverted, or differently colored from what it appears to eye in sound state. Same of hearing, smell, taste &c

Various other functions of body may be impeded. Perspiration may be stopped, or preternaturally increased or morbid in quality, Saliva mucus of nose, may be increased, or diminished or changed in quality - so also the liquor of stomach & bowels - perhaps many symptoms of Dyspepsia owing to morbid state of these liquors - Bile subject to same varieties.

Less variety in the second class of Symp. viz Uneasy sensations. - May be pain in any part of body, or without pain or anxiety w.h accompanies fevers in some of the stages, and suffocation, & all diseases of the Thorax. This is totally distinct from Pain & more intolerable. The sensation of Sickness also distinct from pains from anxiety. Vertigo w.h is not only the depravation of sight, but felt, altho the eyes be shut. Nausea, may be long both to this & the last class. Somnolence.

There also or change of sensible qualities, comprehend also considerable variety – preternatural heat, or preternatural cold. change of color, as redness in inflammation, paleness in many diseases, yellowness in Jaundice. livid or black color in gangrene – Wasting of body in fever, hectic &c Swelling in various cases, from obesity, dropsy, inflammation – Hardness of the soft parts of body, lastly ~~or~~ too great a degree, or softness.

Name of Disease should be given to the combination of sympt. without reference to the cause, in general. But in many cases the cause is also taken into the idea. Pneumonia for example not only means Pyrexia, id. difficulty of breathing, cough, & pain in thorax, but also these sympt. as proceeding from inflammation of lungs. so of Dropsy, & many other diseases. In such cases when cause known no inconvenience from taking it into our idea of disease, but in many instances cause not known or only supposed, & therefore to take the supposed cause into idea might lead to wrong conclusions.

Diseases arranged into Classes, Orders &c.
Cullen divides them into four classes Pyrexiæ, Neuroses, Cachexiæ, & Locales. – This arrangement not perfect, tho' Dr C. was sensible, but sufficiently accurate for use. – Between the diseases of the first two classes there is great affinity. Many of them may pass into one another, as different orders & species of fevers. All the Phlegmasiæ nearly allied, so are the Exanthemata. – Same of second class as Palsy, apoplexy, & comata. But two last classes not so intimately allied.

Often greater difference between different species or varieties of same disease than between different orders; & greater difference of practice required. Thus the Cynanche tonsilaris & Cynanche maligna require a totally different practice. So Distinct & confluent small pox. 4th first of little or no danger – the other one of the most dangerous diseases known, hardly less fatal than the plague. Locales

6. Jaundice from Gall stones requires a quite different practice from that wd. arises from Scirrhus liver, & both from that wd. proceeds from Spasm. Palsy from compression, different practice from that wd. arises from poison. great variety also in Epilepsies. In Vernal & autumnal Intermittents, the first often has considerable degree of inflammat. Death. The latter often concludes with debility. Apoplexy too at different stages of life gives different prognostics & requires different practice. in youth tendency to Phth. in old age to Apoplexy.

1 Sep. Pyrexia

most common, violent & dangerous of all diseases. Sydenham computes that two thirds of mankind die of fevers. & that of the remainder two thirds are cut off by Phthisis. This calculation, especially for our own country perhaps much overrated. but certainly a very great proportion of mankind die of febrile diseases — Cullens definition —

Horror, or sense of coldness, followed commonly by rigor or shivering, & tremor. In all diseases of this class that are exquisitely marked, the cold fit or Horror may be remarked. as in all fevers, inflammations, exanthemata. But in these last, the cold fit often very slight, hardly perceptible, or sometimes entirely wanting. Thus in the Intermittent P. may suffer many days before he has a cold fit. & in going off of disease, the fits first become less perfect - then disease will be reduced to a hot fit only, & then disappear. In fever of this country, horror not so often wanting as is supposed. The coldness that intervenes fever supposed to proceed from the cause - from external cold applied to body when in reality it is the beginning of fever - Hence the common notion of ascribing fevers to cold, because P. felt cold at beginning - tho this was really the commencement of the disease.

It is not peculiar to the cold stage to be wanting. The Hot fit may be wanting in

8. Intermittents. May in long continued Intermittent the Delirium has come on at usual time when all the other symptoms had disappeared. Other symptoms have taken place of the hot stage as violent headache, coma &c.

Horror of use to distinguish the commencement of the disease. It may lanquish several days before febrile state become very perceptible. If the horror be felt it will lead us to foresee the fever.

Cold stage has been considered, by several Physicians, & by Dr Cullen among the number, as cause of the subsequent symptoms. Coldness from spasms of extreme vessels which prevents the circulation from reaching the extremities, & consequently causes an accumulation of blood in the internal parts. Hence many symptoms may be accounted for, the uneasiness & anxiety that are felt - the nausea & vomiting, & the obstructions that are often formed in the internal organs.

But tho the other spasmodic state of extreme vessels be allowed as causing, or at least as contributing to cause many of the symptoms of fever,

it certainly does not follow that the whole phenomena of fever depend on it. It is most likely only a partial & accessory cause. This state of extremities not always followed by the effect. The cold stage may exist without being followed by the hot. The hot stage may exist without being preceded by the cold. Neither is the effect proportioned to the cause. A violent cold fit may be followed by a slight hot one, & vice versa. From these considerations it appears that the cold wh. precedes, or begins the febrile attack is not the cause of the subsequent symptoms. All contraction of extreme vessels often removed long before fever ceases, an opposite state that of great relaxation may exist, & often does exist while the fever increases, & danger becomes more imminent from this very circumstance.

Necessary however to attend particularly to cold stage. As many of the other distinguishing symptoms of fever may exist when no febrile state is present.

10. The heat of body may be very much increased & the pulse quickened to an extraordinary degree by sudorific medicines, by violent exercise & great external heat. Violent exercise may raise the pulse to 180 in a minute, without any febrile state. The previous horror & rigor therefore necessary as a diagnostic of the febrile state.

In ancient times the frequency of pulse was not much attended to. Hippocr. mentions it but slightly & incidentally. It is not always to be relied on, as many circumstances may produce it. The appearance of Physician & the alarm this may create may quicken pulse 20 or 30 in a minute. Of late however it has been much attended to, & with propriety, as it is almost always essential to Physical circumstances may indeed sometimes prevent it. Or compressed brain in fever — comatose state of P. in beginning of ague paroxysm. In the end of Typhus 150 pulse has been observed

slow. In some febrile diseases as Pneumonia, when breathing very much oppressed pulse has not been much increased. Beginning of Typhus Mitior has sometimes but little increased frequency of pulse, & little heat. In bad fevers of warm climates, as Yellow fever, pulse has become small soft & slower; heat natural when P. in greatest danger, in advanced stage of disease.

What frequency of pulse indicates febrile state?
Natural pulse generally about 70 or 72. but some P. have it much slower; not above 50. so that in them symptoms of fever may be strong before pulse increased beyond the ordinary state in most men. If other sympt. concur may regard a pulse from 80 to 90 as characteristic of fever. from 120 & upwards, indicates violent degree of disease; & if the species of pyrexia be dangerous as in small pox pneumonia, inflam. of viscera great danger of P. – In high pulse it generally becomes feeble & fluttering that

it is difficult to be counted. External heat & warm confined, foul air will quicken pulse in fever, to a most alarming degree – so will stimulating remedies, as volatile alkhali, aromatics, wine, spirits when injudiciously exhibited. When administered properly they will reduce the pulse.

In young children great frequency of pulse in slight febrile disease, or only disorder in the bowels, if attended with costiveness the pulse may be prodigiously quickened; when the evacuation of intestine will bring down pulse to its natural standard. Cynanche in children, & mild vernal ague give great frequency of pulse.

Heat, connected w.t. frequent pulse – tho not always, the rapid circulation is often the cause of the heat. Pulse may be strong & frequent in cardiac, in last stage of pyrexia, after body has become cold. That is after circulation has become so feeble as not to propel the blood into the extreme vessels. Increased heat almost universal in Pyrexia. Thus used to be the

first, & chief circumstance attended to as characteriseing fever. hence name pyrexia, febris. from πυρ. ferveo - Antients attended most to heat, moderns to frequency of pulse. Heat better ascertained by touch than by thermometer - takes some time to determine heat by therm. Heat has been raised to 110, or even 113. by sudorifics for trying how high heat could be raised. But 105 will give to a person in health feeling the P. a sensation of burning heat. Best to attend to increase of heat from time to time in progress of fever.

Many functions disordered. Almost all functions are disordered in fever, as well as in many other febrile disorders. The senses internal & external - delirium, stupor, confusion of thought & memory. Taste smell sight verbatim - no pleasure any sensation from ns, in health pleasure derived. Sleep bad, broken, disturbed by frightful dreams. appetite impaired or lost. digestion does not go on - thirst, secretions irregular - costiveness

suppression or irregularity or vitiated state of urine, nausea, vomiting, dryness of mouth, Body incapable of receiving nourishment. hence wasting of body, quick absorption of fat so that young healthy person in the ordinary length of continued fever in this country reduced almost to skeleton. Hence practice of some of the ancients of refusing any nourishment or even drink to P. in fever. certainly impossible to nourish body by food in fever, but drink extremely necessary, & very quickly absorbed from stomach. — weakness particularly of limbs. this sometimes very remarkable from very onsetment of invasion of disease. but often goes on gradually. P. have almost fallen into Syncope on accession of common typhus of this country. In plague P. have died instantly of mere debility. the sudden loss of strength remarkable in Influenza. strong men have dropped down unable to stand from moment of their being attacked.

Many febrile diseases in wd loss of strength not so remarkable, as Rheumatism in some

throat, but in all febrile diseases there is loss of strength to certain degree. In Pneumonia debility not so remarkable as in many less dangerous Pyrexia. P. will be able to employ considerable exertion after the disease has proceeded beyond possibility of cure. In some instances too the attack of continued fever not attended wth so great debility as might be expected. P. have been able to walk several miles a day or two after the attack. But this exercise generally rendered the subsequent symptoms very violent.

There are some other general characters of Pyrexia wch not necessary for definition. —

Pyrexia transient affections only. If left to themselves they do not go on increasing indefinitely - but run a certain course. They have their increase, their acme & their decline, & that in pretty regular periods. In the common continued fever the favorable termination often occurs without remedies, or with very improper treatment. Thus about the 14 day from

from the attack. Sometimes however they have longer course — may be protracted to 20 or even 40 days. — By proper treatment they may often be cut short. The same observation applies to many febrile disorders as measles, small pox, Angina. — The small pox by inoculation, rendered wonderfully mild, so as hardly to bear any resemblance to the violent cases of the natural disease. — The tendency of Pyrexia to run a particular course well exemplified in the Paroxysm of an Intermittent. This tendency to run a course more rational account of febrile symptoms than that wt. is founded on the Vis medicatrix. In consequence of a multitude recover from all kinds of fever, the most fatal, as the plague, not excepted, without any medical aid; or with worse than none.

Many fevers exanthemata Phlegmasiæ &c may be cut short by violent remedies — by any thing that gives great shock to system, & so interrupts the tendency of constitution to run the ordinary course. Such as rough emetics, drastic purges, great heat, cold, violent emotions, & passions. By many of these circumstances have Intermittents, continued fevers &, even

removed.

The Definition of Pyrexia does not apply to every individual instance of the disease, but only to those of each genus that are strongly marked. All of them may be met with in such slight forms as to give very few distinguishing symptoms of Pyrexia. Thus inoculated small pox, in many cases of all the genera of Phlegmasiæ, exanthemata, & profluvia.

Febres.

Pyrexia without primary or topical affection. — In many cases topical affections are found along with Fever, as cutaneous eruption, hemorrhagy, profluvia of various kinds. Inflammation of brain, viscera or conglobate glands. But these noways essential to the disease. They are mere accidental circumstances that may either be present or absent without altering the nature of the disease. In general none of these circumstances attend fever

Pyrexia preceded by languor, lassitude & debility. — These not peculiar to pure fever. May precede catarrh, measles, small pox, cynanche &c. But these

Languor lassitude & Debility wd. introduce pain Fever generally more remarkable than that wd. precedes the Phlegmasia & other febrile disorders. – Sometimes however the febrile attack so sudden that none of the previous symptoms observed. P. have been in good health this day, & awaked this the night with all the symptoms of fever fully strongly formed. But these instances rare. generally P. indisposed for a day or two or three before the febrile symptoms very observable.

Two Phalanges of Fever (no matter whether two or more) Intermittent & Continued.

Intermittent – Pyrexia, febris, from marsh effluvia, this not always easily traced. tho every reason to believe that this, or effluvia from moist earth, the proximate cause of intermittent. In fenny counties of England the men removing a few hundred yards from the fens has prevented Intermit. or even the going to the top storey of same house.

Intermittents differ only in their periods. They

appear to be all of same nature. They are all cured by the same remedies; & from this circumstance too we may infer that they are from the same cause.

Paroxysmus plurimus — This always the case unless the P. be cut off in first paroxy. which is certainly a very rare occurrence even in the hot climates; & totally unknown in our own country.

Cum apyrexia, vel saltem intermissione ~~interposita~~ — Remittent & Intermittent by many authors treated separately. But if not precisely of same nature, they are certainly very much allied. Tertian may become first double tertian; & then the Paroxysm may be protracted so as to occupy the whole 24 hours with only a little intermission. Quotidian Remittent may become shorter in Paroxysm, & then pass into double tertian & lastly into tertian in its progress to cure. Both are from same cause. & both are cured by same means. Hence most likely they are only different appearances of same disease.

Cum horrore redeunt.— This generally very plainly perceptible in Intermittent, but not so perceptible in the Remittent when the remission not great the horror of the next paroxy. hardly to be perceived even by the Physician.

Unico paroxysmo quoque die — Irregular intermittents, &c. There is considerable variety may have more than one fit in a day — See Cullen Nosology This circumstance intended to distinguish the intermit. from the continued fever — wh. last according to Dr. had two paroxysms each day. But this piece of theory unsupported by fact. as the two paroxy. of continued fever cannot be often discovered by the most accurate attention.

Three Genera of Intermittents — Tertian Quartan & Quotidian. They are distinguished by the interval, wh is counted from the beginning of one paroxy. to that of another. This period is generally very regular. Sometimes it anticipates & sometimes postponers.

the beginning of fit too more regular than at termination as from different length of fit there is often great difference between time of termination of one paroxy. & that of another.

The Tertian the most common, & frequently febrile type. This more distinctly seen in warm climates than in our own. Were the Quotidian the most common we might give some account of it, from the diurnal revolution of constitution. Many circumstances tend to form this revolution: as light & darkness, & consequent labor & rest. Habit also has great influence as in the time of taking rest - the time of taking food, & of evacuating the intestines. And did the Quotidian occur at the time when the pulse is naturally quickened, & the constitution most ovulated, we should say that these circumstances accounted for the Phenomena - or at least that the Phenom. of Quotidian ~~was~~ particularly connected with them. But the reverse of this is the case. The Quotidian is by no means the most common - nor does the paroxy. happen at the time wd. on this supposition it should do. The Quotid. paroxy.

occurs in the morning, whereas the exacerbation of pulse is in the afternoon. The Quotid. paroxy. goes off in the afternoon, when the exacerbation of pulse comes on. So that this circumstance rather a difficulty in our way to account for the febrile paroxysm. We know of no circumstance in our constitution that should give a tertian or Quartan revolution. & the only circumstance that appears to account for Quotidian is against the theory. The regularity of intermittent period is therefore as yet totally unaccounted for.

The ordinary intervals of Paroxysms are in the Quotidian 24 hours; In the Tertian 48. In the Quartan 72. But in many cases the Quotidian only a double tertian. It often begins as a regular Tertian & the Paroxy. of the 1st, 3rd, 5th days precisely similar to one another; while those of 2nd, 4th, 6th days also resemble one another, tho very different from those on odd days.

In some countrys the Quotidian is most common, after the Tertian, & in others the Quartan. Quintans & Sextans have been observed, & even longer periods, but these very rare.

The Quartan has the longest interval: the longest cold stage, hot & sweating stage shortest, & of most difficult cure.

the Tertian more violent hot stage, cold stage shorter & not so severe, but Paroxysm longer on the whole. The Quotidian has least of the cold stage, indeed it is often hardly perceptible, but long hot stage, & long sweating stage; & the paroxysm is on the whole the longest.

Phenomena of Paroxysm – 1. Languor, sense of debility, sluggishness of motion, & uneasiness in exertion it. The languor from debility. The sluggishness of motion often from a degree of coma wh. is present. Yawning & stretching, & anxiety from the accumulation of blood in the larger vessels. Yawning stimulates lungs, & tends to propel blood thro them, & consequently relieve the congestion in heart & larger arteries. Stretching by constricting veins, accelerates the motion of blood in them, & tends also to take of the accumulation in larger vessels. (Cullen Vol. 1. page 58, section 10.) Paleness & smallness of features probably depend on spasm of extreme vessels. The same effects produced by cold – depend on constriction of cellular membrane, & also on spasm of extreme vessels. Paleness from blood not being allowed to rush into minute vessels, on account of spasmodic

constriction of them. Hence power of cold in stopping Hemorrhages both active & passive.

P. begins to feel sensation of cold himself, when to another person his body feels remarkably warm. This Phenomenon we cannot explain, farther than by saying it must depend on defect in the sensorial power. As the hot stage comes on the P. feels the cold alternately with heat for some time — neither can we account for this.

Heat from the increased action of heart & arteries. Redness & turgescence of face in this case, more than of any other part of the body, may be partly owing to the vessels of the head setting off nearly on a right line from the direction in wh the blood is propelled from the left ventricle of the heart. Hence on violent exercise the sweat breaks out first on the forehead, as also it does when the sweating stage of Intermittent commences. ~~[illegible]~~ The disorder of the sensorium perhaps depends partly on this circumstance: At least it is often evidently connected with an increased determination of blood to the head. This the doctrine of Stahle, & appears highly probable.

Dryness of Skin wh. continues after the heat has begun indicates that the spasm is not yet entirely gone off.
Sweat depends on relaxation of spasm, & on greater than natural relaxation of extreme vessels.
Sweating cools body, on ordinary principle of evaporation producing cold. Exciting cause also removed & action of heart & arteries return to their natural degree.
Small & frequent respiration depends partly on debility, & partly on congestion of blood.
Anxiety – on the accumulation of blood.
Cough may arise from increased exhalation into lungs, on consequence of accumulation of blood, overlay them. May be also a catarrhal affection – There is often other inflammation connected with fit of Intermittent. as of the Lungs or Brain. and of these higher degrees of inflammation from Intermittent, may readily suppose that lower degree of it which is indicated by catarrh.
Appetite for food ceases on accession of cold fit. This happens in all fevers. We suppose the appetite for food to depend partly on the

proper secretions into the stomach & intestines & partly on the contraction of muscular fibres of the stomach. There seems to be a connection between the flow of saliva into the mouth, & the secretion of the gastric juices. Both are disordered in fevers of all kinds. So may the contractability of the muscular fibres of the intestines, and the functions of the lacteals & absorbents. There is also a consent between the stomach & the surface of body. Spasmodic state of surface tends to induce nausea, which relieved by relaxing surface. Hence the nausea ceases when hot, or rather sweating stage comes on. And vice versa, the effort of stomach in nausea by tending to relax the surface may help to produce, or at least accelerate the sweating stage. When nausea has been so great that no medicines would stay on stomach, the bringing on a sweat has relieved it, & rendered the stomach capable of retaining whatever was thrown into it. This has happened in the Plague. (Boerhaave).

Thirst. proceeds from the spasm. thus in going into the cold bath, the spasm wh is induced on the surface produces thirst, & dryness of the mouth & fauces. On the same principle as the spasm is relaxed the thirst disappears.

Change of secretions as Urine from the same cause.

the urine is limpid because the constriction of the vessels prevents the grosser particles from passing, tho it allows a passage to the finer particles. This is also analogous to what takes place in cold bath. The urine secreted during the spasm is limpid. — When the spasm is removed the quantity of grosser matter which had been retained passes off, & consequently renders the urine more turbid than usual.

Costiveness — may proceed partly from the inverted motion of stomach, & consequently of at least part of the duodenum, in the nausea & vomiting wh. is common in cold stage. Want of proper secretions into the intestinal canal from the spasm of secreting vessels may also contribute to produce the costiveness. As may a degree of torpor of the intestines, corresponding to the general debility of all the functions. In the first stages of almost all fevers the body costive — probably from the above causes. When these causes cease to operate Diarrhea generally ensues. In intermit. costiveness often connected with bilious vomiting. & the diarrhea which sometimes follows commonly bilious. The green color of stools is owing to bile mixed with an acid.

the subsidency of Tumors, & drying up of ulcers evidently from spasm.

Sensibility impaired in first stages of all fevers, tho in some febrile disorders much less than in others. Thus Acute Rheumat. has seldom any considerable diminution of sensibility; the common catarrh, a much less violent inflam. often has a very considerable degree of it. This is very observable in the fit of an intermittent.

In the hot stage an opposite state is produced, that of uncommon rapidity & hurry of thought; great sensibility of touch, hearing, taste, & smell. The first state must be owing to a general diminution of the nervous energy & is analogous to the general debility that takes place, probably from the same cause. The latter state seems to proceed from a low degree of inflammatory diathesis; which however does not proceed so far as to induce delirium or Phrenitis. It may be illustrated by a state of the eyes approaching to inflam. tho strictly speaking it may not be ophthalmia - when the eyes are dim, weak, reddish, & somewhat dry. The turgescence of the face also evinces that there is somewhat of an inflammatory state; or at least a tendency, an approximation to it.

the effect of fever on the intellectual faculties still more remarkable. In all fevers the recollection is weakened. The mind has less command of thought & attention than usual. P. is fatigued by a little thought, can hardly command enough of attention to listen for a short time to conversation, even when not required to join in it – often can hardly answer a few simple questions without feeling himself exhausted by the effort. This state of mental debility may be always observed in the first stages of an ague fit. This state of mind may proceed from same causes, & induce general debility.

The rapidity of thought wh is observable in the hot stage proceeds probably from approximation to inflammatory state. The impulse of the blood thro the brain may induce it. It may be illustrated by what takes place in violent exercise. a person walking or riding hard cannot give the same attention & continued application to any subject of thought as one at rest, or walking or riding slowly. In a word every thing that hurries the circulation weakens our power of attention, & overcommands our thoughts.

30th

Headach - may be referred to the uncommon flow of blood to the head, in many cases. It comes on most commonly after the rapid circulation thro the head has begun, & goes off as the circulation returns to its natural state. But it cannot be owing to this alone, as it occurs sometimes when no symptom of increased determination to the head is present - It even takes place altogether off the hot stage in some cases. In such cases it is probably owing to the state of the stomach. There is great sympathy between head & stomach; & in many people a disorder in the stomach is generally attended with headache. It may also be partly caused by an increased action of the vessels of the head tho there be no remarkable determination of blood. The throbbing of the temples, in this case, indicates an increased action of some of the vessels of the head.

Pain in the back seems to depend on the state of muscles, rather than on congestion.

It is most felt when the P. is in an erect posture that is when the muscles of the back are exerted. The horizontal posture almost always eases the pain, & generally removes it. That is the pain depends chiefly on the debility of the muscles. There may also in this case be an approach to the Rheumatic state, just as there is to the inflammatory state in the head. —

(For description of Phenomena of the Disease see Boerh. Aph 749-50-51 & Lowlers Comment. on them Cases - Cleghorn &c - all these authors take notice of the long continuance of the Quartan & of its difficulty of cure - indeed before the introduction of Bark there was no proper cure for Quartan.

Remote Causes.

1 Predisposing cause. — Even in the best health there is a general susceptibility to Intermittent. Just as no degree of health or strength can save from small pox, or from plague when the exciting causes are strongly applied. Sydenham's speaking of the difficulty of escaping Intermit. in Fenny counties of England by those who went there from other

place uses this strong expression "Paroxysmi valentes paucos intra dies corripiuntur"

2 Age — The time of life is chiefly from youth to a pretty advanced age. Children seldom take intermit. & old people are but little subject to it — tho there are instances of infants & very old men having the disease.

3 Climate — Warm climate gives predisposition to the disease. Warm climate gives the body a tendency to the intermittent period, even tho the disease may not have appeared. Thus people coming from hot countries flattery the Typhus of this country have it approaching to the intermittent form very often. The remission will frequently be so great as to be almost an intermission.

4 Season. The disease prevails chiefly in spring & Autumn. It may occur in all seasons. But not nearly so common in the cold of winter, & heat of summer as in the variable weather of spring & autumn. Perhaps the alternations of heat & cold at these seasons may contribute to the formation of the disease — or rather give the body an aptness to be affected by the exciting causes when applied.

5. Mobility of the System. People of irritable habits more subject to fev. than others ~~of irritation~~ who are less susceptible.

6. Debility. This a more certain cause of Intermittent than of continued Fever. Weak people most disposed to all fever. Strong people apt to catch disease when the body debilitated, as by fatigue, heat, wounds, cold, evacuations, &c altho formerly they had escaped it. Continued Fever most dangerous when it attacks the young the strong & plethoric. But Intermittent most obstinate in the weak & irritable habit. This is of great use to be attended to as a Prophylaxis. ~~Should such~~ people ~~who~~ are exposed to the contagion should guard against every thing that tends to weaken the body. As violent exertion. Intemperance, excess of any kind. Should not go abroad fasting. Should occasionally take some stimulant, as onion, garlic, or even occasionally ardent spirits. Should live on a nourishing diet, take a moderate quantity of wine or fermented liquor & proper exercise.

7. Tendency of Intermittent to return after P. has once had it. This is very strong. The disease easily reproduced by very slight causes, as anger, fear, disorder of Stomach, want of exercise - east wind, damp, cold &c none of which affect healthy persons except in such circumstances. There is even a disposition to the particular period in which disease first appeared. How long this may last uncertain - but certainly it will continue strong for many months after cure & general predisposition for years - or for the whole of a long life.

Occasional or exciting Cause.

This is now universally allowed to chiefly or almost solely Marsh Miasmata, or exhalations from moist earth. — This was but little attended to by the ancients. Lucretius (Lem 1090) mentions it very distinctly, but little attended to afterwards to the time of Sydenham. (De haen, page 919. 20) - Lancisi Physician to the Pope directed the attention chiefly to it - Stahl overlooked it - so did Boerh. & the Mechanical school - But now there

Physicians have been led to attend to it, there are found innumerable circumstances that confirm it beyond a doubt. In many parts of Scotland, high & remote from marshes, Intermit. wholly unknown. Sinac. mentions the same circumstance in France. The grievous sickening circumstance of a little Town which had a stagnum close by it into which the purgamenta from the town were carried. This produced no disease while the mud did not rise above the surface of the water. But when the pool was filled, & the mud exposed to the air a dreadful epidemic broke out, which increased the annual rate of deaths from 400 to 2000 — & this he ascribes solely to the putrid exhalations of this marsh. — See also Mead, Huxam, Lind the elder, Sir John Pringle, & Dr Lind of Wendover's Thesis (1788) on the Intermittent of Bengal.

We are ignorant of the peculiar nature of the effluvia. It has been supposed to be putrid. Sinac mentions that the air of the Town & the stagnum, at the time of the epidemic were

36. to putrid that meat could not be kept fresh more than three hours, & that the utensils were quickly covered with a putrid crust. (in nearest situation to the stagnant)

It is certain that mere watery exhalations do not produce the disease. Sailors at sea perfectly free from it. People on banks of large lakes, or running rivers, when no stagnating water on the banks not subject to it. East wind that sometimes prevails here with very thick fog does not produce it, nor give so great a tendency to it as a dry east wind. The seamen on banks of Newfoundland amid impenetrable fogs not at all subject to it.

If the disease prevailed only in autumn we might suppose that it proceeded from the exhalations of putrid animal & vegetable matter. But difficult to account for its prevalence in spring if from this cause - & for its appearance too in spring in such cold countries as Sweden, when it is always prevalent after the frost. — I presume this is no difficulty to the theory of its proceeding from Putrid exhalations. In Sweden the

decomposition of vegetable & animal substances does not go on in Winter, nor proceed far in autumn. The sudden approach of the cold checks the putrid fermentation in autumn; & the frost completely locks up the effluvia. When the frost goes off the effluvia are set loose. The rapid increase of the heat hastens the total decomposition of the animal & vegetable matters that are in the marshes. Many plants & animals too die during the winter, which cannot putrefy till the warmth of spring. In the frosts of winter the air is freer from exhalations than at any other period of the year. Hence intermittent should, in cold countries be less frequent in Winter than in Summer, if they proceed from putridity. In our own country the changeable weather of winter should cause a constant Putrescence of vegetable & animal matters, & consequently a tendency to intermittent more or less strong according to the state of the weather.

During the heat of Summer the earth is dry. The dead substances quickly dry also, & consequently the putrid effluvia become fixed. Than by moistening

them may set loose the fixed particles or form chemical union with them one part of the water combining with the ~~matter~~ base of the effluvia. It is certain that Dead matters suddenly dried up by heat, as of fire give out no putrid noxious vapors tho they be reduced to the same principles as those that putrify by slower heat. There is therefore a certain degree of slowness of decomposition necessary to give putrid phenomena, & these phenomena most remarkable when the decomposition made in certain degree of moisture. Hence in hard frost there should be no noxious effluvia, in dry hot summer weather very little. In changeable weather more or less according to weather. In wet summer, a considerable degree. In spring & autumn most of all from the quantity of dead matter than in marshes. & the Phenomena of the fever should correspond to these varieties in the exciting cause. If the exciting cause be indeed putrid effluvia. ——

Effluvia, whatever be its nature, heavier than common atmospheric air. Those who live ~~low~~ near

the pontine marshes, on a level with marsh very subject to disease - while those who live higher on the rising grounds perfectly healthy. In many cases removing two or three hundred yards, so as to get a few yards higher than level of marsh will be sufficient to save from the disease. May even be small an elevation as removing to top story of the same house will often prevent the disease, when P. would have taken it on the ground floor. Or facilitate the cure when it could hardly be accomplished in the low part of the house.

Antigua very dry island, and one of the most healthy in west indies. Often must bring them fresh water from other Islands, & generally least to rain w^d. they collect in cisterns. ~~[illegible]~~ Yet in the lowest part of that Island intermittents often prevail, while those on Monks hill perfectly healthy, & removing a guish P from the hollow to that hill he very soon gets well. So in the unhealthy months people who live near the Pontine marshes come into town, & remove from low part of city in vicinity of marshes to that w^d. is higher & removed from them.

Intermittent has often been said to be contagious, but no proper evidence for this. generally it certainly is not contagious, & the cases where it has been called contagious are most likely to be accounted for from the general application of the exciting cause. Or typhus with marked remission which it ~~generally~~ often has in hot climates, may have been mistaken for intermittent.

Has been endemic in places not marshy, as in the close woody countries of Torrid Zone, perhaps the exhalations in such countries may be of same nature w.th those of putrefying substances in our marshes, from stagnation of air among woods &c.

It has become common in countries formerly free from it, & vice versa. The causes in such instances cannot be distinctly traced. In many instances the removal of it connected w.th improvements in agriculture — particularly draining, as in Berwickshire, Carse of Gowrie &c. It is unknown in very cold countries.

Peculiar state of the air may favor the production of disease, & spreading of Miasmata.

perhaps this circumstance may help to account for its being endemic in some places where no marshes. It is evident that the spreading of some other febrile diseases as Small pox, plague &c is connected with a peculiar state of the Atmosphere.

Cold has been assigned as a cause of Intermit. But this most probably only a partial & accessory cause, except perhaps in cases where there was strong predisposition to the disease from having had it before. Cold certainly does not generally produce Intermittent, tho it may produce several other febrile diseases.

The same may be said of Moisture, & of Errors in diet. Neither of wh, of themselves gave the disease, tho by weakening the body, & disordering stomach may give a tendency to the disease wh, otherwise would not have existed.

Intemperance in drinking acts in the same manner, as do fatigue, watching, damp beds, being wet with dew — all of which may render the body more apt to be affected by the exciting cause when it is applied to it — tho without the exciting cause they would not give the disease

 Sleeping in the open air has given the disease in hot countries. Thus of two ships which were together at Island of St Thomas, one lost many men & the other none. The men who died had all slept ashore, none from the other ship had slept ashore.

It seems probable that the body is more apt to be affected by the ~~[illegible]~~ malary cause when in the state of sleep than when awake. This does not imply that state of sleep is a state of debility, for sleep is well known to invigorate the body instead of weakening it. Many functions go on perfectly well in sleep, as digestion. & the secretion of fat is much promoted by it. But there seems to be something in the condition of the body in sleep analogous to the state of debility, in its aptness to be affected by some ~~[illegible]~~ of the causes of disease in that state more than when awake.

During the night too the noxious effluvia more condensed & concentrated. In day the heat expands & raises them to considerable height — hence they are applied in smaller quantity to the body. In night the cold condenses them, & consequently the

body is, in the night time, immersed in a greater quantity of them. The effect of this greater quantity of miasmata is aided also by the change of temperature from the heat of the day to the comparative chillness of the night. — These circumstances seem to account for the peculiar effect of night exposure to miasmata, — especially by sleeping on shore in hot, unhealthy climates, or near to fens & marshy grounds. Hence those whose business it is should pay particular attention to these circumstances.

Suppression of usual evacuations, or repulsion of cutaneous eruptions, act — in as far as they tend to produce fever — by producing plethora, irregular determinations of blood, & a peculiar irritability of the constitution — so that slight causes applied to body produce very violent effects.

Corresponding to the effect of debility is the effect of depressing passions in producing fever. By weakening body they induce that state in which the exciting cause operates with most force when it is applied. — Van Swieten mentions case of young woman who had a violent ague produced

which lasted all winter, by a fright at seeing a field mouse; & that after she had got well, a waggish boy throwing a dead mouse at her brought back her intermittent. — The exciting cause had certainly been previously applied to the body, & the debility or irritation of the fright had brought on the fit. For certainly an Ague is not the ~~[illegible]~~ common effect of the sight of a field mouse.

East wind — This has unpleasant effects on body in all parts of the world — In America — In the east indies in Persia &c This has been remarked. — In this country the east wind is most apt to hurt agueish P. in Spring. Probably because this wind blows over the greatest tract of snow in its passage to us. At this season it makes intermit. wonderfully obstinate. While it continues cure often can hardly be effected. & when cure has been accomplished in other state of wind, the coming on of East wind has brought back the intermit. & this happens very frequently. East Wind peculiarly unpleasant to Hypochondriac P. as well as to agueish P. —

Morbid Dissections. —

The Phenomena observed in the body after death do not explain the cause of the disease. They are chiefly, perhaps solely effects, & only accidental effects too. They may explain sometimes the cause of death however. — Little attention has been paid to this subject by Morgagni, who is perhaps the most accurate observer of the morbid Phenomena in dissections. Lenac, Cleghorn, Sir John Pringle have attended to it, & from their observations the following circumstances are drawn. —

Head generally sound. & thus tho the disease has been accompanied with violent Headache, or delirium before death. This proves that the headache or delirium of intermittents is not always from inflammation of brain. Sometimes the brain has been inflamed. Polypi have been found in the ventricles of brain. Redness of coats. Serum effused. Abscesses with pus have sometimes been found.

Thorax. The cavities of heart & large vessels of lungs & have been found very much distended w. blood of a very black appearance.

This black appearance has been chiefly observed in those who have died of the cold fit. A serous or reddish fluid has been found in the cavity of the thorax, & the vessels of the lungs perhaps from the exhalation when the spasm relaxed after great congestion in the large vessels - or depending on the same cause as dropsy in other parts of the body

Stomach has been found prodigiously distended with flatus. Senac mentions some P. who died after eating hearty supper when disease was wearing off, whose stomachs were very much distended with food, water & flatus. This may be of use to direct our practice in regard to food & drink in intermittent.

The intestinal canal has been found distended in some places, & constricted in others. Perhaps from these constrictions proceeds the black bilious vomiting, just as it is produced in Ileus, or after long continued colic. - Stomach & bowels have been observed overcharged with bile, of a blacker color than usual. The vomitation of this perhaps produces the violent vomiting

& gangrenous spots wd. have been found on the intestinal canal - small ulcerated spots have also been observed

The Liver & Lungs have been found of a putrid color, & much softer texture than usual. And in such cases the body began to putrefy in a few hours after death - This indicates what is called general putrid Diathesis. - The Liver has been observed also whitish, & wasted, sometimes with large glandular obstructions - sometimes much enlarged & hard - sometimes surged with black blood, & sometimes with abscesses in it. The vena portarum has been found much enlarged - so has gall bladder - Spleen has been hard & enlarged, full of black blood - has been supposed to have putrefied & burst - Senac mentions a woman who fell down suddenly dead in whom the spleen was found to have burst, & discharged quantity of blood into the abdomen. Cleghorn found the spleen enlarged in all his dissections - sometimes it has weighed 4 or 5 lbs, wd more than weight of

48, an ordinary liver — Spleen generally weighs from 6 to 10 ounces. Pancreas has been found much affected, hard, swelled, and ulcerated. Peritoneum, omentum, mesentery have been found affected, but these chiefly in cases of long standing.

Heavenly bodies have been supposed to have great influence on Intermitt. This only in warm climates, & remains to be established. Some have attended to it more than others, & some have thought it so certain as to regulate their prognosis by it, while others have thought it deserves no attention.

In warm climates moonlight may tempt people abroad in the evenings, & thus make them expose themselves to the contagious effluvia concentrated & condensed by the cold. Lind of Windsor, in his Treatise on the Royal Fever (1768) asserts the doctrine of lunar influence on Intermittent, & supports it by many facts — afterwards however he was inclined to retract his theory. The lunar influence was only felt near the sea — which at full moon had very high tides, wh. covered great part of the low swampy ground on the shore. By removing the P. a few miles inland, at a distance from the

marshy ground the influence of the moon was not felt. At Canton, where the river is embanked, & the high tides do not flow upon the land, no connection was observed between the periods of the moon, & the accession or exacerbation of intermittent. But when the wind blew over the swampy rice grounds the fevers were found to come on, & to be made of difficult cure. In many places within the Tropics this lunar influence has never been remarked.

Dr Francis Balfour, on fixing intermittent fever of Bengal, & Dr Robert Jackson (whose first papers on the subject may be found in Lond. Med. Jour. Vol 8) are the two great advocates for this sol-lunar influence. They do not however agree in their period. Balfour assumes the 3 days before & 3 after full moon as sickly period. Jackson takes the 7 days preceding the full & 7 preceding the new moon as the period in Ed. This influence is chiefly exerted. of which the 4 days preceding the new & full moon are the most remarkably unhealthy. This connection more remarkable in the dry season of West Indies (where & in America his observations made) than in the wet sickly season. As if during wet season the exciting cause so strongly applied to body as to cause fever at any period, while in dry season the assistance of moon necessary as accessory cause.

 — This speculation seems childish for if moon really an accessory cause it must cooperate equally in the wet as in the dry season, & so preserve the proportion between the number who take fever at the time this influence exists, & those of those who take it when this influence does not exist. — This connection too more remarkable in the mild than in the violent cases of the fevers — & to this speculation the same objections may be made. For if the cause be applied so as to produce a mild fever only the moon cooperating wd. cause should make it worse, & the same if the exciting cause applied so strongly as to produce a violent degree of the fever. The more morbid causes that are applied to body, the morbid symptoms should certainly be the worse. In the West Indies, (Jamaica) 11 of 15 took the disease on one or other of Dr Jackson's sickly days. In America 80 of 100 took it during the period of Lunar influence.

Prognosis.

In cold countries intermittent seldom dangerous. Tho even in our own country sometimes dangerous from debility in long continued cases, bringing on cachexia, particularly dropsy with obstructed viscera. This however very rare in Scotland. It is more frequently fatal in England, particularly in the fenny countys

And in France Italy &c it is more dangerous than in England. And in hotter climates it is much more dangerous than in any part of Europe - In the south of America, in Bengal, in the west Indies, on the west coast of Africa it is a disease of very considerable danger. In these countries it runs rapidly to great debility, & to what is called a putrid state shewn by petec. hemorh. &c. Debility may be very great in the first Paroxy. P. have even died in first fit. And in a very few days the debility & putrescent tendency may be so great as to leave no hopes of a recovery. This state indicated by great oppression of stomach, vomiting, diarrhea (both generally bilious) delirium, stupor, or both conjoined. Tremors, convulsions - great paleness of face, cold sweats - a tendency to the remittent, or even to the continued type; an aptness to double-, or continual oppression of stom. even in intervals, more still if vomiting continues, & pain, indicating perhaps a low degree of inflam. of the stom. or other viscera.

The disease modified by season. Milder in spring - a vernal tertian used to be thought salutary in England. An Ague in the spring is Physic for

a key - was said to James 1 of England - It must be for a young King then replied James, & he died of the disease.

Autumnal, especially Quartan often grows worse & obstinate as the cold of winter comes on - may last to the warm weather of next summer

Febris autumnalis vel est longa vel lethalis.

The longer the disease continues it is the more difficult of cure - gets rooted in the constitution from force of habit - has lasted more than four years - been even said to have continued 20 years - This obstinacy of tedious Intermittent not only from force of habit, but also from diseased viscera w. are generally induced, & general weakness of the constitution. Often the obstructions of liver spleen &c & the weakness of the stom. permanent. to the general disorgement of the constitution, with tendency to dropsy, especially of lower extremities, can never be cured. tho this last symptom, or rather effect of the disease sometimes, goes off very easily in this country.

Anticipation of the Paroxy. generally a bad symptom as marking the increase of the disease. & the converse -

the retrocession of the fit, a favorable sympt. - But to this there are some exceptions.

Pustular eruption about the mouth been said to be a favorable sympt. this sometimes appears when the disease is going off.

The Paroxy. becoming milder, less of the cold fit then less of the warm, & of the sweating - the fit breaking, becoming incomplete, as being without the cold fit - or without the warm - & lastly perhaps there being no fit, but only a degree of debility at the usual time of Paroxy. are all indications of a recovery.

The danger of Intermit. is from the violence, the number, & the combination of the morbid sym. Frequency, & strength & hardness of pulse indicates a great violation of the nervous system. hence tremor convulsions, & even death have been induced. Particular affections of thorax as pain cough &c indicately a tendency to inflam. in lungs. Violent uneasiness, pain, & vom. vomiting indicates strong affection of the stomach, perhaps a low degree of inflam. & is very dangerous indication.

Great overflow of bile, bad, from vorticella in gens to the alimentary canal. This chiefly in warm countries. Fetor & putridity of fæces, bad from same cause - often vertates bowels so as to produce great diarrh. - & the danger of this shewn by the paleness & other sympt. of debility wh. accompany it - from the tremors & convulsions wh. follow the debility so induced.

Stupor, coma, disorders of all the senses, very bad sympt. weakness & frequency of pulse indicates a very dangerous state of debility. In hot countries P. has recovered after the pulse had been gone from the wrist. - Other bad sympt. accompany this weakness & frequency of pulse - small laborious breathing - By the state of the breathing the immediate approach of death often indicated.

Involuntary stools & discharge of urine - bad. These may proceed from mere stupor - But if the P. not comatose they indicate very great degree of danger. So difficult deglutition - P. seldom recovers after swallowing lost - indicates great weakness of muscles, or even of trachea - perhaps

a paralytic affection of them.
Putrefaction said to take place in circulating mass of fluids. whatever be in this opinion, the symp. by wh. this state of body is indicated are real & very unfavorable. such as putrid smell of sweat of urine, of stools, of breath. In warm countries the smell may be quite cadaverous. Urine when felt generally of dark color & thick. this from blood, which may be from relaxed state of kidney, just as vibices, or hemorh. in other parts of body. or it may perhaps indicate a solution of the crasis of blood, wh. allows it to exhale.
Great disposition to gangrene of blistered part, & of those parts that are irritated, by pressure. In warm countries this has been so remark. that blister on thorax has very soon produced a gan. that consumed in to the very bones of the thorax. In Gang. there is certainly a putrefaction takes place, & in the prime vie, as indicated by fetor of stools.
Tendency to hemorh. without plethora. to spots & vibices on body, from relaxation of capils

allowing the red globules to pass into the cellular substance. The blood has been said to be in such a state of solution that it would hardly coagulate. All these are very unfavorable symptoms. —

Many of these circumstances proceed merely from heat. They may be prevented in our own country by keeping P. hot. & or. hot regimen. Dropsical swellings indicate a great relaxation of the system, which allows too great an exhalation.

In long intermit. there is generally produced a considerable degree of yellowness of complexion. This has happened in very short continued fevers & in mild form. The yellowness has been, even in such cases so great, that it never went off. This generally happens in long continuance of disease. —

Method of Cure. —

It has been questioned whether it was proper to attempt the cure of Intermit. in the beginning of the disease. This plan used to be reckoned dangerous.

that without any proper reason. If we consider that a long continued fever generally breaks the constitution, especially in warm countries it will appear proper to put a stop to it as soon as possible. From the stopping of fev. bad consequences hardly ever arise — those that have been accused to it, have really arisen from the Disease continuing too long — and from allowing it to run its course bad consequences always arise. It is in the meantime a most uneasy situation for the P. & it leaves traces in the weakness of constitution wd. can hardly be removed. Hence it must appear proper to stop it as soon as possible. In hot countries it is often so violent that even at the beginning it cannot be stopped — the longer it continues it is the more likely to increase — hence the propriety in such countries of not delaying a moment.

Brg. seen only one instance of bad effects of stopping fever. The P. had caught Disease in marshy part of Kent — & after it had continued for some time it was stopped by a great dose of Brandy & pepper administered by an old woman

A violent epistaxis succeeded, & the fever returned. It was cured by the same means & the Epistaxis returned with great violence so as to bring the P. into great danger from debility - the P's legs were swelled before it could be removed. — There had been strong Phlogistic diathesis, & the absurd prescription coinciding with it produced the Epistaxis. —

Several Chronic diseases have been said to be removed by Intermittent. As Obstinate Headache - fixed pain in the shoulder - various species of Neuroses as Mania, St Vitus dance, Vertigo, palpitation of the heart. — If such disorders be present & the Ague seems mild it may be of consequence to allow it to go on for a few weeks to try the effect of it. The circumstances of the Intermit. & those of the Patients strength age &c will direct when this is proper. In such cases must take care to prevent the debility from proceeding too far, by nourishing diet, light, moderate quantity of wine, & moderating the violence of the Symptoms.

It has long been an opinion in this country

that an ague should not be stopped till it has thrown its proper Type. Often it will be some time before the disease be properly formed. There will be no pure apyrexia. Uneasiness, languor, weakness of Stom. frequency of pulse will be permanent. Several remissions & exacerbations will return in the same day. In such case we may either wait a few days till the Type be formed, or rather we may use some gentle evacuation so as to make the bark continue on the Stom. & produce its effect. for while nausea & sickness remain the bark will hardly operate. There seems to be no danger from arresting the course of the disease in this stage. In warm countries this state of the disease is generally the most dangerous; & therefore it must be highly improper to wait the regular formation of the Type; & in our own country it is certainly not necessary, since no bad effects arise from stopping it at any stage. ——

60. 1 Indication of cure To moderate the violence of all the Symptoms. —

Much may be done towards a cure during the continuance of the fit. Tho in our country any single fit of ague not dangerous yet in unhealthy climates a single fit may be fatal. This according to Lancisi often happened in the low countries, & it happens much more frequently in the West Indies. Even in the fenny counties of England the disease may come on with so much violence that no means of cure will prove effectual. We are happy in having a remedy wd. in ordinary cases is infallible. But much may be done to prepare for the proper & effectual administration of the bark, wd, if not attended to the bark may fail of its effect. Nausea & vomiting will prevent its remaining on the stomach, or its effect if it should remain. An Inflamm. death. will prostrate its effect. Many Symp. also wd. bark will not remove; as headache, disorders of bowels — Inflam. of Lungs &c — these often are the cause of the greatest danger.

Systematics have formed different indications of cure according to their views of the disease. Boerh. 758 - Cullen 258. Yet what they prescribe is very much the same in the same circumstances. Cullen's the most judicious, because his remedies agree with good sense & experience independent of all theory.

We are first to moderate the violence of the cold fit. This prevents farther debility. relieves the P. from the most distressing Sympt. obviates the effect of habit in the disease, & makes it yield more easily to remedies.

1. By Deluents. These obviate thirst, which gives a very hurtful irritation, & they relax the spasm by the sympathy between the stom. & the surface. & by filling the vessels as the deluent is absorbed, & so removing mechanically, the spasmodic stricture. Of all deluents the basis is water. The simplest are the best as barley water, water gruel, toast & water, Tea, Whey &c. is both cooling, grateful, & antiseptic. These should be given cold. and in small quantities frequently repeated. A great quantity of

of diluent should never be thrown into the stomach at once. All immoderate repletion of stom. dangerous. — By small quantity repeated as the P. may have a desire for it, or so long as it may not feel unpleasant, all the good effect is produced wd. can be got by dilution, & without any danger. Care should be taken not to produce nausea. Hence the improprietty of many decoctions formerly used, as of sage, pennyroyal &c. They are disagreeable, apt to nauseate, & consequently they will not easily be taken in proper quantity. And even tho taken in proper quantity the nausea gives a hurtful irritation — Then only good effect must be from the water they contain — If any thing aromatic or stimulant be necessary some of the more grateful stimulants are preferable. Small beer may be used, negus, tack whey &c. Acidulated drink may be allowed even in the cold fit if it be grateful to the P. tho this is more proper during the hot stage.

~~2. By the moderate application of stomach.~~

2. By Emetics. — During cold stage generally nausea & a tendency to vomit. This to be relieved by emetics. The gentlest will be sufficient. Mere dilution will often be sufficient; or water with an infusion of Camomile. During the debility

of the cold fit, & the tendency to vomit, strong emetics might be dangerous, coinciding w. the tendency to vomit it might & probably would operate too violently. Hence the strongest Emetic that should be given is Ipecacuanah. This has the advantage operating quickly; & with the vomiting the hot stage will be brought on. For the vomiting by relaxing the spasm accelerates the hot stage. With other emetics the nausea may continue 5 or 6 hours before the vomiting comes on – a gentle emetic may bring it on immediately & so shorten the cold stage.

30 gr. Ipec. & 1 gr. tart. Em. were given after the cold stage came on, but without knowing that it was forming. The effect was not too violent; for the P. was difficultly moved by medicine, but this in general is too rough an emetic. – The ancients used salt & water as emetic in this case.

3. By antispasmodics – there a great class of remedies but their effects perhaps entirely stimulant. Opium only 8 gr. tried. It has had a good effect in cutting short the cold fit. But it is best employed in the middle of the hot fit. from 30 to 60 drops of Laud. Smaller dose not sufficient

64

stronger dose might be dangerous. may generally give 1 or 2 drams of comp. Sp. Lavend. along with it to make it agreeable.

Vitriolic Ether to the extent of 1 or 2 drams has been given but without any good effect. it can act merely as a stimulant, & may aggravate the hot fit, or produce head ache, delirium.

4 By the judicious application of warmth. The heat generally hurtful in fever, yet during the cold stage of an ague, moderate warmth may cut short the fit. The warm Bath perhaps the best mode of applying heat: but this is generally impracticable. Pediluvium, especially if the P. complains of cold in the lower extremities. fomentations with flannel wrung out of hot water. or bottles of hot water put to the feet. — Friction may also be of service along with warmth. Friction along the course of the spine, wh. the sensation of cold often follows, may do good. The P. being put into the hot bath at the moment the cold fit was expected has prevented its accession. This with frictions along the spine, may at least moderate the severity of the fit.

During the Hot Fit.

The Hot fit is the period of greatest danger. It is therefore necessary to moderate the violence of the hot sympt. & this must be directed according to the nature of the sympt. present.

1 By blood letting. This is indicated by the appearance of a strong inflammatory death. especially in Vernal Tertian, Young strong plethoric P. with strong frequent hard pulse, fixed pains, cough, appearance of inflam. of lungs, or other viscera. In this country it is seldom necessary, tho it sometimes. A woman in the Dev. Hospt. had an ague which proved obstinate for a considerable time. The inflam. death was not at first suspected. At last sympt. of Pneum. appeared & she was blooded. The blood exhibited the buffy coat; & the P. was relieved for a short time, but died of the disease. The inflam. death had rendered the bark ineffectual. Had she been blooded sooner, & the infl. death obviated it is probable she would have recovered. In hot climates blooding often dangerous. Dr Lind

66. & two other surgeons tried bleeding each on two P. & each of them lost one P. tho the bleeding was very moderate.

Bleeding sometimes makes an irregular fever assume the proper intermittent type, & then yields easily to the bark (Sir John Pringle) By relaxing the body, it tends to bring on the sweating pst, besides relieving many of the most urgent symp. which attend inter. with strong inf. death. — It is contrary to the opinion of most systematics, & indeed the inst. death. wd. make it probable, as not commonly nor often found in inter. tho it sometimes is

2 By refrigerants. as acids, neutral salts, nitre, &c — The salt formed by vegt. alk. & vegt. acid. — 5 to 10 gr. nitre, with vegt. acid. a convenient form of giving nitre, or ℞ nitre ʒj lemon juice ℥j. — In these forms the nitre less apt to produce nausea. To many stom. nitre gives pain, cramp, nausea. when lemon juice cannot be had vinegar may be used. ℞ R. Chryst. Tart pts 3. vegt. alk pt i sugar q. s. mix in a glass of water, makes a pleasant cooling saline draught. — Vinegar ℥ss saturates

gr. of veget. alk. — These salem draughts are gently diaph. diuret. & laxat. They prevent or stop nausea & vomiting when taken in their effervescent state. or they may be taken successively so as the effervescence may go on in the stom. The aer effervescens has a great effect in allaying the vomitation of the stom — they are useful in all febrile diseases, (see Lind)

Vegetable acid may be given in the P.'s common drink, or Chrys. Tart. may be dissolved in water. The water will not dissolve more of them than is necessary. May be given in water gruel, or in weak negus &c —

All Diluents are refrigerant, & consequently are useful in the hot fit, & in the same manner admissible as in the cold. — There are cases in wh. cold drink may be dangerous, when strong insp. Death. present. in these cases drink to be given tepid — particularly when there is topical insp. as of lungs. But generally cold drink is preferable. In Italy it is common to cool the drink with ice, or even to cool the liquid of Glysters with ice. —

All the acido dulces fruits are refrigerant, as strawberries, currants, apples, tamarinds &c & are very useful in this stage of the disease.

3. By Opiates. These relieve the urgent symptom of hot feet more speedily than any other remedy. in a quarter of an hour they will relieve violent head-ache &c but sometimes they induce delirium, tho generally they have a contrary effect. They lessen the heat, & tend to bring out a free & easy sweat. Opiates have similar effect in continued fevers, Typhus, small pox, measles &c but not nearly the same degree of effect. In these diseases tho they give a sound sleep they do not bring down the pulse nor lessen the heat. But they have these effects in hot feet of intermit. For this difference we cannot account. They sometimes give costiveness, which can easily be obviated by any gentle laxative in small dose. — They break in some degree the force of habit in the disease, & make a cure more easy. Much less bark will serve after they have been employed. Thus as

sometimes a matter of considerable importance, as in camps, & among the poor — who from their inability to buy a large quantity of bark, such as a pound or two ℔, may sometimes be necessary when opium not employed, are often tempted to have recourse to quack medicines the basis of which is arsenic, the next most powerful remed. for inter. after bark. with opiate from 1 to 3ij bark will stop the diseas. (see Lind's appendix)

During the Sweating Stage —

little to be done in this stage, which is seldom dangerous. Too great sweat relaxes body, weakens P. & thus makes cure more difficult. may even tend to induce dropsy from relaxation. Hence the propriety of moderating the sweat. Some Systematics favor sweat by warmth, & sudorif. This may do good in vernal tertian, with inflam. Death. which is often present in some degree in vernal tertian. But in the autumnal fever rather the opposite state of

debility prevails - hence impropriety of forcing sweat in such cases (see Sydenh).

In general it is dangerous to stop the sweating by the sudden admission of cold. Should therefore rather favor it for some little time, ~~[illegible] gradually~~ taking care to support the P's strength by med. cordials, light nourishing food as chicken broth Jellies &c - the sweat to be promoted in the mean time only by moderate warmth & diluents. Then we should check it gradually, by changing the P's linen, rubbing him dry - then making him get out of bed. In this manner the sweat may be safely stopped in one or two hours, wd. if left to go on, might have continued for 6 8 or 12 hours, & thus weakened the P. very much.

During the Intervals.

It is chiefly during the intervals that a radical cure is to be attempted - & the

1. Thing is to remove the occasional causes.

The Miasmata wd. cause the disease will probably

or prevent a cure. Hence the propriety of removing P. from places where these miasmata prevail. This is all the benefit to be expected from change of air. When P. removed from seasonal cause the disease becomes milder, & easily yields to remedies. In our own country it will generally go off spontaneously, tho this not to be trusted to. In some places as Aberdeen an ague will not continue, it is same in most parts of Scotland.

Of great consequence to get seafaring people who catch the disease in such climates as Bengal, Batavia &c to sea. At Batavia the tendency to disease so great that the whole constitution broken in very short time. in 68 two English ships experienced this in a fatal manner. The slightest scratch or wound, quickly became a large spreading gangrenous ulcer, which eat to the very bone. Analogy between this pestiferous state of air & noxious exhalations of living human body. Removal from both air in both cases does more than all the prescriptions of Physicians to a cure, which

could not be effected while P. remain in foul air. The naval hospital in Jamaica placed in very unhealthy situation. The mildest fever brought there quickly turns to a remit. or even continued type — when by being removed to a different air, it will quickly yield to remedies.

2. Obviating Inflam. Death. — For this purpose bleeding hardly ever necessary in fever. If at all proper, it should be done in hot fit. If it be thought necessary in interval of vernal season the strong inflam. death. only must indicate it.

Purging relieves the infl. death. removes sordes which might obtain effect of bark, tends to evacuating the bowels. It relaxes the whole body. But drastic purges might relax too much. Hence the mild laxatives only allowable as Glauber salt, Epsom salt, soluble tart. Senna.

Purging more useful in warm climates than in ours — more useful even there emetics in W.C. — Yet even in Europe when the fever tends to a remitt. or continued form, cooling purge has

brought back the regul. intermit. type. And in warm climates inter. more apt to assume continued form, then in greater load of sordes, & acrid bile than in our climate. Sordes & bile may be in great quantity without producing diar. They cause anxiety, loading of stom. nausea. pain in belly, flatulence. tension of bowels, w.h last is a very dangerous sympt. Hence the propriety of cathart. in W. C. The neglect of them said to occasion relapses. Purging also tends to remove obstructions. acrid cath. have removed obstructions of viscera in this disease when other means have proved ineffectual. Operation should be over before the return of the fit.

Emetics – clear the prima via of sordes, & mucous w.h prevent efficacy of bark. They are antispasmodic also – especially on surface. And sudorific. They promote perspiration, & thus tend to make the cold fit, as well as the hot mild & short. – They emulge the biliary ducts; & promote all the secretions in the prima via. – They tend to remove obstructions in the liver & spleen. – They affect the

nervous syst. change its state, & thus break in on the habit that is going on. By giving a shock to the constitution they interrupt the course of the sympt. Hence both intern. & cont. F. have been cut short by emetics — Ipecacuanah sufficient to remove sordes. Antimonial Emet. may be given if great shock wanted. But we must be sure that the constitution of the P. able to bear the operation before we admin. such a rough medicine. Tart. Em. dangerous to some constitutions — especially in considerable doses — It often operates with too much violence, & for a many hours. Dose 1 gr. Tart. Em. to ℥j water. ½ gr. Tart. Em. to each dose repeated two or three times will operate — Tartar Em. if it be judged necessary, should be given in water only. No other addition should be made to it, unless perhaps a small quant. of an aromat. for the taste. Even this superfluous, as the taste of it is not very disagreeable. Neither acids, alkalies, neut. salts nor absorb. should be combined w.t. tart. emet., as apt to decompose it.

15 or 20 gr. whole infused, may be used as emetic, its operation is speedy, & soon over. But Ipecac. the best, if only to clear the primæ viæ. It should be given in pretty large doses. The effect will be to bring on the vomit. more suddenly, without making it more violent. Some of the Em. generally passes the pylorus, too & acts as a laxat.

It has been proposed to repeat Em. till the Stom. is cleared of the mucus that always generally forms there in fev. – The sordes may soon be removed. But the tough viscid Phlegm can only be removed by curing the disease. Tho in span of few weeks twenty Em. should be given there will still be found a quant. of this mucus. May two Em. at the interval of a few hours will each bring off a quantity of same matter. It is therefore impossible to discharge all the Phlegm, as it forms as fast as it is removed. The attempt therefore highly improper.

Frequent Em. very much weaken the Hom. of itself too weak in Jnt. They weaken the constitution, & in consequence of this debility, make the disease more obstinate; as well as afford a tendency to cachexia & dropsy.

In Inflam. Death. low cooling diet necessary. Especially in Spring, in young Pl. P. & those who have been exposed to much variety of weather - so as to induce Jnfl. Death. But in general this is not necessary. In Ant. Internal. there is rather Ipsor. state - of Putrid Death. — whatever be in the opinion that the circulating mass of fluids may run to a certain degree of putridity in the living body, it is certain that the matters contained in the alimentary canal may become putrid. The sympt. too usd. are said to proceed from putrescency of circulating fluids, are certainly real. Such as fetor, debility, tendency to Petechiæ, putrid stools, urine, vomiting, Hemorhage &c.

In such cases the putrid morbid matter must be discharged by gentle evacuations. The P. must be kept on a cool regimen (~~for certainly & cordials may be prescribed~~) But low diet is not necessary nor proper. The bis vita ought to be supported by nourishing diet, by cordials such as wine or when that cannot be procured, by malt liquor or even spirits & water. Mild, acescent diet.

In cases attended with great debility, as in old P. especially in autm. Quart. the P. should be allowed a more generous diet. Care should however be taken not to overload the stom. nor to employ food of difficult digestion, such as dried or smoked or salt provisions. For in this disease, tho there may be, & generally is both appetite & digestion in the intervals, yet both are considerably impaired. Hence particular attention must be paid to diet. Succulent, farinaceous, food milk, broth, jellies, a young animal food, of any kind should be allowed. together with a moderate proportion of wine or other fermented liquors.

Some Systematics have laid great stress on

promoting the secretions & excretions. This may be useful, tho perhaps not of so great consequence as it has been represented. The secretions & excretions may be promoted by moderate exercise, which also strengthens the body — By wearing flannel, to guard the body against the vicissitudes of heat & cold. By friction — By moderate warmth, avoiding what tends to heat the body — By the cold bath, wh. is one of the most powerful tonics known.

But the body in many cases too much disposed to secrete a thin copious sweat. Therefore this, from its debilitating effect, to be moderated & checked rather than promoted. Hence the improprietys of what have been recommended as Attenuants, & deobstruents. Of these Sal Polychrest chiefly recommended, Sal. Ammon. vorious Aromat. Alk. — These effects as attenuants & deobst. very doubtful. Most likely they are neither atten. nor deob. : & if they were both they are only the more improper, as the attenuation of the fluids is naturally perhaps too great, & therefore should be moderated, rather than afforded.

Various means have been employed for the purpose of stopping the fit, & with success. Every thing that gives a strong shock to the syst. & thus breaks in upon the order & habit of the symp. has had this effect. – A few of these means follow – Necessary however to premise that the application of them may often be dangerous, & that excepting in very rare, anomalous cases, they can never be necessary.

Warm diem. sudorif. – as aromat. with opium. – Vol. alk. w^d. opium, & arom. given just before the accession of the fit.

Various acrid substances, as serpentaria, & Bitters combined w^d. cathart. as gentian & centaury. or gentian w^d. senna & agaric.

Sydenham treated P. w^d. sage & ℥ij theriaca dissolved in ℥ij Brandy. or ℥ij pulvis coccyg. these large doses, & the effect healing stimulant cathart.

Milder sudor. have had same effect, as sal. amon. or sal Am. combined w^d. veget. alk.

Decoction of sarsaparilla with urine or lemon

lemon juice. But either too much or too little dilution in this case dangerous. The one makes the sweat too copious, the other too small.

Opiates w. Emet. or cathart. may excite great sweat & stop the fit.

Emetics by themselves, or brisk cathart. have had same effect. But latter not free from danger, as by concurring w. weakness & stom. if they do not stop the fit, they may weaken too much.

All those remedies that are heating & stimulant, if they fail of stopping the fit do much harm. They render the fit more violent, particularly during the hot stage. They increase the Inflt. death. & produce more violent Sympt. than had formerly appeared. Head ache, delirium &c are often the consequence of them.

The cold bath immediately before the accession of the Paroxy. has stopped the disease — more from the shock it gives to the System, than from its tonic power.

Mild diaph. with dilution for bringing out a sweat on the surface. Or emet. just before the fit. In this last case it is said that

the operation of the Emet. should be over before the fit begin. But this not necessary. If the operation begin at the moment the fit is expected, the violence of the fit will at least be broken if it be not prevented altogether – For this purpose Ipecac. best. unless we intend a strong shock to the system, in that case antimonial Emet. must be employed.

Emet. in nauseating doses have weakened the body. If nausea only intended P. should not drink, least vomit. be induced. & when the effect has been continued as long as we wish Op. should be given to allay the irritation of stom.

Various other expedients have been employed chiefly by the ancients. Violent exercise so as to produce & keep up a sweat. This must act from the shock to the syst. By violent Exercise the blood determined to the surface; & thus also may prevent spasmod. state of cold fit. Exercise neither increases secretion of urine nor of saliva – it only promotes perspiration.

Strong friction has been used. This excites

82. The action of the vessels of the surface. - It may be used either dry, or with warm stimulating ointment as oleum succini - or opium from its antispasmod. effect. This answers best w. children. Rubbing along spine with op. has moderated the fit.

Various stimul. applications have been made to the skin to wrists, arms, feet of Hom. Salt & hops boiled - what effect the hops can have is not easily to be conceived. - Ranunculus root - this a rubefacient. Tobacco this both stimulant & narcotic - it produces a violent effect on the nervous syst. even when applied externally. Blisters have in some cases cured agues - (Lind) - Warm external applications - as a hard boiled egg split & applied to the wrists - the heat must act as a stimulant. It can have no other advent. from the egg. The white of an egg with salt. The salt would blister - it is not easy to guess what good the white of the egg is to do.
Electricity - from its sudden effect on the mind most probably.

Various impressions made on the imagination

on this principle we are to account for the effect of such applications as tobacco with a bruised spider - swallowing a spider - hanging a nut shell with a live spider in it about the neck - holding a frog in the hand till it die. Sudden unexpected accidents - as pushing P. when he has had no notice of it, into the water. Such things have stopped some of the most violent spasmod. diseases, for a time, as Epilepsy. - Strong emotions of mind, from the shock to the nervous syst. as Joy, Anger, terror Eagerness. Fabius Max. was cured of a Quotan by his eagerness in a battle at wh. he commanded. - Awe, terror, horror - thus making P. wound or kill a man - drink human blood - eat of sacred birds, or any thing that produces strong religious awe. Making him drink a quantity of his own urine &c -
Confidence in the efficacy of the remedy - especially if connected with religious reverence. Hence the effect of charms, amulets, incantation. Why - send a P. cured of ague by swallowing a paper on wh. the cabalistic word Abracadabra was written. - All these act by

impression they make on the mind. And then effect shew the connection of the disease with the nervous system.

Mellers, or the Peruvian Bark have almost universally stopped the fit. This last remedy used to be suspected of bad effects. But the bad effects complained of are evidently the effects of the disease, not of the remedy. They are even removed by the bark, or at least prevented from proceeding. Thus dropsy is obviated by curing the disease by bark, & thus preventing the debility from going on. (Lends Appendix)

Bark said to be a specific in ague. We mean by a specific a remedy that is effected tho we do not know the precise mode in which it operates. Large doses of from ℥ij to ℥ss. have operated completely in an hour or even less time, when given before the accession of the fit. Hence we are led to suspect that the specific virtue of the bark is not owing to its tonic power nor to its influence on the circulating mass of fluids. It has not time to change the

mass of fluids so quickly - & besides many other remedies stop the fit, which certainly do not act on the fluids.

We may suppose that B. acts on nervous syst. thro the nerves of the Stom. As a Tonic it could not be so sudden. but nature of Tonic obscure. Force of muscles depends on their contractibility. & whatever increases their contractibility ~~or tonic~~ or the force of the muscular fibres, is a tonic. It is however doubtful if there be any specific strengthening medicine. When a P. is so weak that he cannot stand, & just on the point of fainting, we know that a glass of wine or of spirits, or various aromatic substances taken into the Stom. will restore the strength, & that immediately. - but this is not the idea of a Tonic, which is supposed to have a direct & permanent effect in strengthening the system - whereas the effect of wine &c in such circumstances is of very short duration.

Hence we are led to infer that Bark

strengthens the body by removing the disease, rather than removes the disease by strengthening the body. Many things strengthen the body more than bark does, thus a rich nourishing diet with wine & exercise strengthens the body more than any thing else – but these do not cure an intermit. Many stimulants, by curing the disease strengthen the body, but their tonic power depends on their curing the disease, – their curing the disease does not depend on their tonic power. Arsenic cures Intermit. with greater certainty than any thing else except bark. Yet arsenic weakens the body more than any thing else that is known – a very small quantity of it will leave a very great degree of debility w. tremors & even Paralysis which may last for many months. – If we consider the effect of B. in other diseases connected with atonia, we shall be led to conclude that the effect of B. is not merely tonic. In Typh. when the degree of atonia is generally much greater than in Inter.

B. has little effect. Its virtues in this can have indeed been extolled – But on trial it has been found to have no great efficacy. We can neither stop nor modify Typh. as we can do Intermit. by B. Yet, if B. acted as tonic, its action should be greatest in cases where the atonia greatest. (This theory does not seem well founded – the degree of atonia may be too great to be overcome by the tonic power of B.) In Inter. with Phlog. Diath. bark should not be needed, as the tone is already too great. And indeed B. may fail unless we first diminish the Ph. Diath. But when we do this B. will operate with great certainty. The specific virtue of B. in Int. does not therefore depend on its tonic power – since strengthening the tone will often revive the disease, diminishing must weaken the tone before the B. will operate a cure.

Of the Mode of Administering the Bark –

Great stress has been laid on the proper preparation of the B. But without any reason. There has been a controversy ~~between~~ among Physicians

concerning the different kinds of B. the red, & the Pale Quilled. – This controversy was chiefly carried on in the years 1784, 5, 6. The cause of it was an Apoth. in London who had got a large quant. of red B. which he could not sell – the pale only being used before that time. He prevailed on some Phys. to make trial of it, & to proclaim its virtues – hence B. was quickly sold & the red B. came to be in fashion. It was said to be the species first used, & that the pale was afterwards introduced. The red was said to be most efficacious – It certainly has the strongest sensible qualities, It is most bitter & nauseous, & hence supposed to contain a greater portion of med. virtue. The two kinds are certainly very nearly allied – perhaps one from large & other from small branches. It appears that the red is the strongest, but this advantage is counterbalanced in many cases by its disagreeing with the stomach. $\frac{2}{3}$ red said to be equivalent to $\frac{3}{3}$ Pale

Of the different preparations of B. none seem to have any peculiar efficacy. The B. in

substance certainly the best way of applying it. unless it should not lie on the Stom. as is sometimes the case - in wh. case we must have recourse to other preparations of it.

The decoction preferable to the Infusion - It may be made in a quarter of an hour. Slight intermitt. will readily yield to it in this way. But in violent, long continued cases it is not to be relied on.

Extract of B. either in water, or Spirit, or in a mixture of both said to retain all the virtues of B. without the useless part. & that 1/4 pt. the quant. of B. in substance, sufficient in the Extract. This may succeed very well with children, who cannot easily be made to take B. in Subst. Or with P. of weak Stom. who cannot retain the B. in substance.

To P. who loath the B. in substance, it may be administered in form of Electuary, with some Syrup. In this case it should be prepared every day - Otherwise apt to ferment by being kept. - a little brandy is a good addition

90 to the electuary. If both make it sit easier on the stom. & promote its operation.

Some P. cannot take either electuary or powder. But they can generally by use be brought to bear one or the. The B. is often more disagreeable at first than afterwards. If these forms make P. reach or vomit, must try other forms of it. Decoction of B. with some grateful aromat. joined as cinnam. nutmeg &c in liquorice water. or with gum arab. & liquorice together with a quantity of B. in substance suspended in the mixture. The mucilage will keep the powder suspended. The Quant. of B. of more consequence than the form. If enough given, of little moment how it is administered.

Sometimes a small quant. frequently repeated will abate the symp. If we observe this effect in P. who cannot be brought to take large quant. we may persevere, increasing by little & little the dose, & thus in a few weeks we may cure Pater. which the weakness of P's stom. would not allow to be more speedily removed by larger quantity of B.

B. may be given in Boles - only 1 Boles cannot be large enough for a doze - ℈ss enough for boles, but ℈j necessary for full doze —

Of the Quantity of B. necessary.

This cannot be exactly ascertained, as many circumstances may contribute to retard, or accelerate the cure. If the P. continues exposed to the exciting cause some Pounds may be necessary - In other situations a few ounces will do. - ~~[illegible]~~ The Type of the disease regulates, other circumstances being equal, the quant. of B.

A Quotid. has been cured by B ℥ss. a Tertian by ℥ij or ℥iij. a Quartan requires a larger quantity. Vernal Inter. easier cured than an autumnal. The state of the weather affects the cure. In cold damp changeable weather there is greater difficulty of cure than in mild steady, warm weather. The east wind particularly, dry east wind retards the cure - which will be accomplished with great ease when the wind changes to west.

When the disease has continued long more B. necessary than in recent case. Often poor

low diet will retard operation of B. The state of the stom. & viscera influences the oper. of B. If stom. much weakened, if nausea & vomit. if obstructions of spleen or liver, if diarrh. present the cure is more difficult. If there be a superabundance of viscid Phlegm, the bark less effectual. In nausea & vomit. the bark not retained. In Diarr. it runs off without producing its effect.

General state of body as Phleg. Diath. influences cure. B. in Phrenzy may be given for a week or more with little effect, when obviating the P.D. by two or three moderate bleedings, & mild purgatives will make it operate with certainty. The Bilious diath. also prevents oper. of B. So does a great breaking down of the constitution, & a tendency to dropsical relaxation.

Sometimes when the disease recent & the intermission perfect ℥ss or ℥i repeated perhaps twice, or given only once, in one interval, will completely cure Quot. Tertian, ℥i or ℥ij during interval, will be cured in one or two revolutions. In Quart ℥i pr. day or ℥iij in one interval. ℥i.ss. have been taken in 24 hours.

In the remit. of warm climates B. must be administered without waiting for the remission. If it stays on stom. gives the only chance for recovery. & if it does not the nausea & vomit. will hardly be worse than without it. ℥j to ℥ij pr. day has been given in such circumstances. ℥j to ℥iij pr. day have cured such remitt. very speedily.

In general small doses of B. not effectual tho large ones almost always succeed.

Wine may be added to B. thus assists its operation. They are best taken separately. both given, especially on bad Inter. at small intervals.

Milk, particularly butter milk a good addition. It hides the taste of the bark.

ʒij to ℥j. ℥ij. or even ℥ss. in bad cases, may be the dose, & several times 3 or 4 times a day at the interval of about an hour. In W. to. ℥ss pr. dose at interval of half an hour has been given.

No addition makes bark more effectual. should not therefore add to it salts of any kind.

 ℞ Liquorice dissolved in ℞ warm water may make it pleasant. – Salts & bitters only make it more offensive without making it more effectual. If any addition required, a little grateful aromatic only should be allowed to make it agreeable.

Inconveniences of ℞.

Sometimes it purges. 5 or 6 drops Tinc. Op. corrects this – If Spasm & ℞. offensive, a small anodyne draught night & morning, or a full one at night or 1 gr. Op. night & morning stops the purging. The Op. also cooperates with ℞. in curing disease.

Sometimes ℞. produces ~~costiveness~~ – 2 to 4 gr. pulv. Rhei to every doze of ℞. prevents this. To some P. this addition to ℞. intolerable. to such give from 10 to 20 gr. pul. Rh. at night. or from 5 to 10 gr. Pul. Rh. comp. or small doze Tinct. Rhei, or Tinct. Rhei comp. If Phlog. Diath. prevails Tinct. Elect. may be given. or Tinct. Elect. S. chyristals of Tart. or Chyrist. Tart. simply. Purging should be avoided during Admin. of ℞.

℞. may increase Infl. Diath. – When this happens we must remit the bark – one or two mod. bloodings

with a saline purge or two, or senna, saline draughts, nitre, sal amm. with cooling regimen, & spare diet, to remove spasm. Death. & then the B. will operate.

If B. emetic, or if there be spontaneous vomiting we may give effervescent draught immediately before B. if vomit. violent, may give ℞. draughts several times an hour or two, or even a day or two before we begin the use of the B. Opium also will stop vomit. So will camphorated Julep. ℥j camphor in ~~the~~ water, or vinegar, will diffuse its strong smell & taste thro whole, while there will not be so much camphor as to heat the body. It will act by its strong sensible qualities as antispasmodic, & allay the vomitation of stom.

The difficulty of giving B. not so great as is imagined. Often tho at first it be thrown up it will afterwards sit very well on the stom. It will make way for itself, bring the stom. into a state to retain it. Opposite in this respect to many unpleasant medicines as Squills.

B. may be given in glisters, especially to

children, & will have the effect of stopping fits. But this not to be relied on — Even dry bark quilted in linen jacket & worn next the skin has been said to have great effect — So stopping children in a strong infusion of B. has been said to cure disease — None of these expedients to be relied on. B. in substance taken into the stom. certainly the best mode of administering it.

When B. cannot be had, other remedies have been used, particularly bitters, as tonics. Camomile flowers, ℥j to ℥iij pr. day, or combined wth Myrrh, snake root, aloe &c — so Gentian has been used, singly or wth vegt. alk. Orange peel powder ℥ss. 2 or 3 times a day. — The strongest bitter, w^h^ is narcotic, & almost poisonous, is St. Ignatius's bean 2 gr. infused in ℥ij boiling water makes a strong nauseous bitter — This has succeed in 4 cases & failed in 8 — All bitters poisonous in large doses.

Mineral astringents as Allum have been used. or joined with bitters, or aromat. 10 to 15 or 20 gr. Allum pr. day, w^h^ cinam. nutmeg, or other arom. have cured intermittent. —

some preparations of Iron have been used. particularly the Flores Martiales. Iron has some small effect as tonic – It may be added to B. & P. Iron – Green vitriol, or sal Martis makes B. nauseous & black, so that P. cannot take it – should therefore use calx of Iron not the salt. – White Vitriol has been used 5 gr. every 4 hours have been given with effect. – Flores Zinci have been recommended. If this not well prepared it proves emetic – If well prepared it has little effect. from 2 to 3 gr have been said to cure Epil. – This very doubtful 30 gr. will have little effect on constitution, if properly prepared. Blue vitriol, or vitriol of copper has been given – but this a very dangerous application, 1 gr. blue vit. will produce nausea & vomit.

Mercury given so as to affect the System has been said to cure obstinate Epilep. when B. had failed. Or after course of Merc. the B. has operated when it had failed before. This is not well ascertained. It may happen occasionally, but many instances of Epilep. running their course when

98. P. under a course of Merc. for Lues. Of late Merc. has been much used in the bad fever of Amer. & W. Ind. called the Yellow fever - especially when it assumes a remit. form. The following the most remarkable inst. yet known of use of Merc. in bad fever. P. was attacked on friday 9th Jan. 95, with slight febrile symp. at first it was not considered as ty. fev. It shewed much of the Tertian type. But P. afterwards became yellow, & the disease was perfectly ascertained. 9th in do. febrile symp. increased to a great degree. Headache extreme, lassitude, pain of loins &c. A mild purg. was administered with little relief. afterwards 16 gr. James Powder 10. 8 gr. Calom. were made up into 3 doses, & P. took them at short intervals. 10th there was a slight ~~[illegible]~~ remission, which lasted but short time. Feb. symptoms returned with more violence, with bilious vomit. 11th there was no remission. Plentiful deduction was employed. And the small doses of James P. was repeated every two hours, so as to keep up a moisture on the skin. 12 a complete intermission. Bark was admin. 4 times hour. 13 P. much worse in every respect. febrile symp. intense, skin dry, breathing

laborious, delirium subsor. Eyes glassy. A Blister had been applied between shoulders for the headach. for some time 5gr. Calom. had been given every hour. ℥ij strong merc. oint. was now rubbed carefully into the P's legs & thighs. in 24 hours 105gr. Calom. had been administered, & ℥j strong oint.ᵗ had been rubbed in. - 14) P. much better pulse full, skin moist. all the febrile symp. abated. no Calom. was this day admin. but ℔ ℥j Sp. hour was given. 15) P. grew much worse, deglutition difficult. P seemed moribundus. Calom. was now given regularly & as much as could be born. So that in 5 days, on one of which no merc. had been given P. had taken 270gr. calom. & ℥20. oint. had been rubbed in. with no immed. effect on const. afterwards slight salivation was produced - in same time ℥42. B. had been given. After the fever had abated P grew yellow, & a mild delirium supervened on the removal of fev. From the effect of Merc. in bad fev. it certainly deserves a trial. the end of febrile symp. many frequent effect of calom. on intestines. 20gr.

calom. generally a very drastic purge. but in this case no purging was produced.

Arsenic has cured both inter. & remit. It has been used, by some Ph. in Lond. pretty freely, and also on the continent of Europe. But seldom employed in Port. The famous ague drops, which are without smell or taste, owe their efficacy to arsenic. This Stahl knew, Spec. 430 to 480, & reprobates the use of them. Dry. never used Arsen. internally, & but very sparingly externally in bad gangrenous ulcers – Even applied in small quant. externally, it has produced the most violent symp. & even death. It ought not therefore to be tried but in cases of urgent necessity when Pb. cannot be tried. & other remed. fail. In this case the danger from the Arsen. may be less than that from the disease. – It has been used hung about the neck, or applied to pit of stom. as prevent. of Plague – violent effects have been produced by this application. Most mountebank remedies for ague wd, have no sensible

probably owe their efficacy to arsenic. It has been recommended by Dr Fowler of Stafford — See Lond. Med. Journ. Vol 8. P. 191, 198. Also Med. Comment. Vol. 11. when it is used the utmost caution should be employed in the quant. administered. By. Ars. gr 64, veget. alk. gr. 64. 80 drops of the mixture should contain ½ gr. arsen. & given in dose of 1/16 pt. gr. arsen. twice a day. or at most 1/12 pt. gr. arsen. twice a day. from such a moderate dose nausea, vomit, gripes, purging or prostrat. It also leaves great weakness, tremor & almost paralysis in many cases. altho the quantity at any one time may not be dangerous yet very bad effects proceed often from the effect of arsen. accumulated in constitution, by repeated small doses. Same with lead, Merc. & several other articles. We affect the constitution strongly by frequent small doses. — Only advant. of arsenic seems to have it that as it is tasteless it is easily administered to children — In America it has been used in Pill. 1/4 pt. gr. Ars. 3 times a day has been given — In dry form it is longer of dissolving

and therefore affects the constitution more slowly than when applied in a liquid form. It has been used in the English Army, as in one regt. at Chelsey Barracks near Portsmouth — a very agueish situation. But from the debilitating effect it left, it was ordered to be laid aside, & B. substituted in its place.

Prophylaxis.

The chief thing is to remove from agueish situations. To live in Towns rather than in the country, or if this cannot be done to remove to an higher situation. If the P. obliged to remain exposed to effluvia, he should avoid all sudden transitions from cold to heat; or rather still from heat to cold. He should avoid exposing himself to the East wind, to rain, to night cold or dews. From a single exposure to dews of the night a chillness or even a regular cold fit may be induced. Should avoid sleeping in damp rooms, or beds, or even in damp sheets. At times the sheets are only sprinkled with water & folded up for use. In such cases they should be thrown aside. The P. should sleep in his

clothes, or at least in the blankets. When P. gets wet he should shift as soon as he comes into the house. Exercise will prevent bad effect of wet. But when P. ceases exercise the circulation is weakened. the determination to the surface is removed, the skin becomes chill. the superficial vessels are brought into a state for receiving the impressions of the cold & wet. — In liquish situations, P. should keep good fire, especially of the resinous woods. the smoke of towns & villages seems to moder. the exciting cause & the smell of resinous woods burning has same effect. P. should not go out in the morning fasting. should take glass of wine & crust of bread before going out. In morn. body more suscept. of infection, from debility than at other time of day, & the effluvia are then also more condensed & concentrated. Some slight bitter infusion in morn. before going abroad, may prevent contagion, or smoking, chewing or plugging with tobacco. P. should use nourishing diet, good deal of animal food & highly seasoned. proper quant. of wine or other

fermented liquor - spirits & water. In ague situations
P. should not sleep on ground floor - nor have doors
or windows open to the marshy ground. Should
guard himself against infl. of cold by warm clothing
flannel next skin - guard against cold or damp
feet - damp feet alone will produce catarrh or
coryza, & have great influence also on ague
P. Particular care should be taken of situation
in Encampments when this can at all be done.
Low situations should if possible be avoided.
In the war against the Turks when Joseph
II. commanded in person, the imperial army
in Hungary had about 50,000 sick & not
more than 20,000 well. Had the Porte
with her army of 100,000 known this he must
have taken the Emperor & all his army.
Joseph himself caught his death in this
situation. He had the ague, which had been
stopped by large dozes of Bark. But he
was obliged to lie, as general, several days
& nights on horseback, wet to the skin.

Epistaxis supervened, & various symp. of Diseased thorax. — Similar case of Marshal Saxe's army before battle of Belgrade — his army of 50,000 was reduced by the month of Aug.t to 18.000 effective men. In some of our Encampments particularly that on Cape Breath during lower Canada, of 2000 men only 5 or 6 sick at a time. much worse in some other of our encamp.ts. — Some strong smelling articles useful to poor in agueish situations — a little distilled spirits in morning will prevent contagion. or what is much better, & perhaps equally efficacious a little rhubarb, or garlic chewed before exposure to effluvia. Some People recommend impregnating the flannel they wear next the skin with some aromatic substance as camphor, garlic — this seems to be more ceremonical than necessary. Agues worst in remote, solitary houses of country. Swallowing the saliva in the morning said to be bad — this seems nonsense. The Dutch think their smoaking prevents agues in their low damp country

When Dr Gregory the father was at Leyden there were 25 Englishmen, who on account of some former riots, were prohibited the dutch houses. Hence they associated entirely w. one another, among them were John Walker, & Charles Lorimbend. They drank & lived pretty freely - seldom less than one bottle of wine each pr. day, often two. Among them was one solitary water drinker, & he was the only person who catched the ague in spring, to the great delight of the rest. This is a striking instance of the effect of generous diet in the prevention of ague.

The effect of strong smelling articles in guarding against ague may depend on the strong connection between this disease & the nervous syst. whatever affects strongly the nerves may act as preventatives, as well as operate as a cure. Stomat. Laxatives have considerable effect in preventing the disease - such as pul. ruf. Venum alact. ℥ij or ℥iij. Orange Peel. Bark taken in wine, or infusion, or tincture &c in the morning before exposure to air. Whatever acts as a laxative by preventing costiveness & indigestion, may tend to keep off the disease.

Sketch of the Opinions of Authors on Intermit.

Hippocrates' works most likely not genuine on this subject. Contain a great deal of theory, ascribe the disease to flatus, cold air getting into various parts of the body. Many parts of his practice not understood — & if it were, it would be of no importance. (Black bile also cause of Inter.) Hippocrates's practice as far as understood does not correspond to his theory — purging the head, by promoting discharge by the nose, purging the bowels, sweating, warm Bath. —

Celsus Cornelianus — his account of disease nonsense. Celsus for a Quartan prescribes rigid abstinence during interval. If disease returned, Emetic & a little food. abstinence again in the interval; & W. B. on the appearance of the fit.

Galen, deduces disease from Bile. Yellow bile hot & dry humor. When much bile fit long, where little bile fit short. Thin bile, a short fit; thick bile a long one: Strong P. short fit, weak P. a long one. Quotid from corrupted Phlegm, wh is a cold moist humor. Bile more volatile, Phlegm more fixed, &

 therefore leaves a greater proportion of morbid matter to occasion more frequent fits. Quartan from black bile, the separation & corruption of it. (Lacunas abridg. 284) Tertian to be evacuated by vomit. purg. blist. decoct. sweat. — anointed w. oil, mulberry, bathing — worse in decline of fever, thin watery food — chief medicine wormwood. —

State of theory & practice in middle of last century from Senactus, a Galenist. — from corruption & stagnation of bile in Mesaraic veins. Thence distributed all over the body. Thus evacuated by sweat but part left & reproduces paroxysm. Vomit. & purging. Then sweating — bleeding seldom necessary. bitters & astringents chief remedies. He united the Galenic & Chemic. sects, & introduced vol. alkali to cure Intermit. & calcined oyster shells. —

Chemical theory, from Sylvius. — obstruction of pancreatic ducts. Thus remains causes acidity & viscidity of humor. Then the humors effervesce with the bile, in the bowels, in ventr. of heart — hence nausea vomit. &c — cured by alternating the vised humors — correcting acidity, & allaying effervescence. Viscidity to be resolved by acids, tho the humors

themselves morbidly acid – Sydenham not the only man whose remedies contradict this theory. – Volat. Alk. & aromatics least always produced by great commotion in the blood. Allen. to be given along with Sudor. & cath. Bleeding never to be used except in cases of great plethora.

Mathematical theory – Dr Pitcairn – from morbid specific gravity & lentor of blood. This produced in primo via, & from thence diffused in the mass of the blood. – Bleeding as soon after the fit as possible – that is at the worst possible time. Bleeding does attenuate the blood. because the blood supplied then at first, afterwards the gluten & red globules succeed. frequent bleeding in Pneum. for example will make the blood at last so thin that it will hardly stain linen red. – After bleeding Emetics most powerful in removing lentor of blood. – then febrifuges, w. he called attenuant, as bitters, astringents – calling them attenuant, mean when – B. & aromat. he said have this attenuating effect.

Baglivi, Pitcairne contemporary - rejects morbid acidity - rather alkaline state, from the good effect of acids. Ascribed disease to morbid tenor & superfluide of Lymph. See Cheyne 160. Boerh. & Swieten (Aph 746, 769) - Best author on Internal. Sydenh. Morton his contemporary. Aretin, for the dispute about the effect of B. V. Swieten - Senac, one of the best author. Huxham Cleghorn, Sir John Pringle. Dr Donald Monro. Lend of Chelsea Hospital - Lend of Windsor. Dr Mey for Inter. of East Indies. Dr Jackson for use of Arsenic, & Fowler. or Lond. Med. Jour. & Med. Comment.

Continued Fever.

When we meet with febrile symp. without local affection, or intermission we call it continued fever. Dr Cullen's defin. the worst in his book.

No certainty that continued f. may not arise from Marsh mat. often occur in situations where P. exposed to them, & how can we say that they may not be the exciting cause?

The theory of two exacerbations in a day not at all confirmed by the fenlen. fev. of this country. The evening exacerb. generally perceptible for the first week, after the middle of the second week hardly ever to be distinguished. The morning paroxy. seldom to be distinguished even from the beginning. Case of Mr. Fraser Sylter singular – for the first 6 days after the fever formed, hardly any variation of symp. Pulse about 100, no remission perceptible excepting one day when the air of her chamber had not been changed. The air was foul, & the pulse had risen to 108, it soon fell on the air being changed. The fever gradually sub-

ceded, & the P. believed out of danger on the 15 day of the fever, tho no crisis had been observed. but on the 16 at noon a fit of rigor came on, w^h. P. believed to be critical, & Dr Ly. did not suspect to be the beginning of ague. Next day at same hour a slighter attack, slighter rigor, & hot stage. But next day exactly at same hour a more violent, & distinctly marked fit of intermit. The rigor, hot & sweating stage regular. pulse up to 150 with slight delirium w^h. had never been observed before in the course of the disease. Bark was now administered, & the violence of the sympt. subdued, but yesterday (Nov. 31st. 1795,) the 29 day from the invasion of the fever, the intermittent revolution still perceptible. Thus the most remarkable case Dr Ly. ever met, where first the remissions least perceptible, & afterwards the remittent type most strongly formed.

In some seasons the remissions more perceptible than in others. 1792 was a wet summer, & the fevers that supervened showed a great deal of the remittent type. The exacerbations, esp.

cially in the beginning of the disease very strongly marked - Sometimes there was almost a apyrexia in the morning, but afterwards the febrile symp. returned with more violence. Dr Duncan met with acute, this year, when the fever first appeared in the violent continued form, & afterwards changed into the Tertian type, with paox. on alternate days.

In warm climates, & in aguish situation the exacerbations & remissions generally more remarkable - the fevers shew a greater tendency to the intermit. type.

It is not, however, necessary that the fever be originally of an intermitt. kind, in order to its having remissions & exacerbations. This peculiarity, particularly the Evening exacerb. seems to depend on the diurnal revolution of the constitution, from labor & rest, light & darkness &c. The tendency to Tertian period seems analogous to that of critical days, which cannot be explained. Diseases that have no connection with intermit. have shewn same tendency. The influenza, in some circumstances, favorable to the intermit. has changed into a Tertian. In strong healthy, plethoric people the revolution of const. not very perceptible.

But in weak nervous persons, the evening exacerbation of the pulse in health will be very considerable. This remarkable in hectic; wh is connected with purulent state of the body. The evening exacerbation generally very distinct. & sometimes also that in the morning.

Synocha, Typhus, Synochus.

Synocha - distinguished by great heat, frequent, strong, hard pulse - Red urine - the functions of the mind not much impaired, nor, in the beginning, great debility.

This disease, as a primary affection, very uncommon in this country. Dr. has seen one instance in wh. P. on 3rd day of fever died, with little debility, violent inflam. sympt. strong hard frequent pulse flushed face, great heat, strong delirium. This the case that came nearest to Synocha, he ever observed. - But it was probably not pure Synocha. In some cases the Inf. sympt. much stronger than in others, they may continue longer - they may even be fatal. Or by proper evacuations the disease may be cut short on the 5, 6, or 7 day before the debility has come on: & yet in these cases had the fever run its usual

course, the inf. symp. might have given place to debility, & the fever ended in Typhus. Most instances of inf. symp. end in this way. Dr G. never observed a continued fever w.h run the usual course without ending in this way. It is therefore to be presumed that the few instances in w.h the fever has proved fatal during the continuance of the inf. symp. & those in which it has been cut short before the inf. symp. had gone off are to be referred to the same class.

Typhus – a contagious disease – not much increase of heat in the beginning. Small weak, & generally frequent pulse – the urine not much changed – the functions of the mind much impaired, with great prostration of strength. – We may know this disease from the prevalence of it at the time, & from the P. having been exposed to the contagion. It may however arise from other causes – There is generally no delirium for the first week – tho often a confusion of thought, & tendency to delir. from the beginning of the disease – at least from the 2 or 3 day from the attack. – Sometimes great prostration of strength

, amounting almost to syncope from the beginning

Synochus. seems to be only a variety of Typhus. It begins with Infl. Symp. & ends with symp. of great debility. The infl. symp. may depend on variety of circumstance, the strength, age, plethoric state of P. his having been exposed to intemperance to vicissitudes of heat & cold & the like. but both Synochus & Typhus are propagated by the same contagion. those called different species, propagated by different contagions, as Measles & small Pox. The distinct & confluent small pox, only varieties, because propagated by the same contagion. In many cases of Synochus we can distinctly trace the contagion. consequently we conclude that Synochus & Typhus the same disease differently modified.

The Notion of fever among Physicians has undergone a great change of late. formerly fever was considered as disease of the blood

Now it is allowed to be a much more universal affection, & to be more particularly connected with the nervous System. Synocha is still mentioned as a disease frequently occurring, by all Systematics, & an account is attempted to be given of its more rare appearance here than formerly, from the increase of luxury, & change of life. This mere theory - The inflam. Symp. which introduce Synochus deserve however to be particularly attended to, with a view to Practice. The mere theoretical division is of no consequence.

The following are the Symptoms of Synocha, as it is described by authors

Synocha begins like intermitt. with a strong cold fit. It shews very little tendency to remission - less than is commonly found in many continued fevers. The pulse is strong, hard, & frequent. There is great thirst, great heat not so great prostration of strength as in many other fevers; but the functions of the mind, & senses, are much impaired generally at an early period of the disease. The stomach is not so much affected as in some other fevers. It is often introduced by violent

head ache, & pain in the back; along with these sympt. there is a sense of lassitude, & weakness of limbs, tho rather so remarkable as in Typhus. Often there is vertigo, & great watchfulness - The tongue is dry, & becomes brown & parched. The face is inflamed, the eyes become red & inflamed, & tender w. impatience of light at an early period. The breathing is quick & laborious; delirium, or ~~rather~~ coma. The Urine high-colored, without sediment, the body costive, the skin dry & parched - There is generally a suppression of the discharge by sores or ulcers.

Synocha, or at least fever with these sympt. often precede topical inflam. such as angina, Rheumatism, Phrenitis, Pneumonia. In these cases sometimes the fever, & sometimes the topical inflam. first observed; & sometimes they commence about the same time. This species of fever seems from the beginning. It does not attack slowly & insidiously as other fevers often do. Blood drawn in the fever exhibits the buffy coat.

Synocha is nearly akin to the causos, or febris ardens of the ancients. There is however some reason to suspect that some of these fevers termed causos are only violent species of double intermit. In very unhealthy climates the Inter. sometimes begins with the sympt. of Synocha, & afterwards

assumes the Intermit. type – such a fever is described by V. Swieten, where a Quartan was combined with Pneumonia. Topical inflam. sometimes have terminated in Inter. or in Typhus

In Synocha there is sometimes an exacerbation of the Symp. before the crisis, but this not commonly observed. Sometimes also Patients in Syn. have been observed to grow easier, & to recover their senses from delir. just before death – this is not very common, tho it certainly does happen sometimes – the vulgar appellation "a lightening before death", shows that there some foundation for the remark. ——

Fevers which last only for one day of this class often observed, chiefly in children, in whom they may proceed from slight causes, as too great repletion costiveness, higher living than usual – hence the common term "Burn Fever" – such affections, tho very violent at the beginning are generally relieved by diarr. or vomit. Perhaps many of the fevers that are cut short by remedies may be of this kind, tho more probably if they ran their course they would assume the Typhus form. Synocha generally terminates in 7 days, they seldom last beyond 11, or if they continue longer they

change their form.

Synocha more apt than Typhus to terminate by critical discharges, such as sweat, diarr. urine, vomiting, hemorr. particularly epistaxis.

Many whimsical prognostics formed, & observations made on Synocha, which cannot be verified at least in this country. They may indeed be more remarkable in warm climates, where the fevers are more violent, & both the symp. & prognostics more marked. ~~Lorenzo~~ Solano a spaniard, observes that in this fever there is sometimes observed what he calls a pulsus dicrotos. a sort of double stroke or rebounding of the pulse, which presages epistaxis. & according to the number of strokes between the times in which the rebounding pulse is felt he determines the distance of time at which the Epistaxis is to happen — according to the strength or weakness of the rebounding stroke he determines the degree of the discharge. The rebounding pulse may often be observed in the fever of this country but the presage has hardly ever been verified here.

Dr Malcolm Fleming, attempts to account for Epistaxis following the pulsus dicrotos. Nature makes an effort to produce a discharge, & with this intention, while the first pulse expands the vessels, she immediately gives another to try to break them open.

He illustrates his opinion by the battering ram — but one may presume that nature does not employ the principles of the battering ram to force a passage for the superabundant blood.

Epistaxis is more certainly presaged by violent headache, great flushing of the face, redness of the eyes, throbbing of the temples, & tumidus aureum-ptching of the nostrils, w^h appear unusually red when looked into, & a small dropping of blood which often precedes a more copious discharge. Epistaxis has been ~~[illegible]~~ preceded by an obtuse pain of the neck or head; by a flow of tears without any emotion of mind; & by a sudden diminution of Urine. It is said that Epistaxis is not favorable except when it happens on the critical days — but this is not to be relied on.

A critical sweat may either be the cause of the solution of the disease, by resolving the spasm, or the sign of it, by showing that the spasm is already resolved. It is indicated says Solano by the pulse now & then, rising fuller & stronger for two or three strokes. In general a soft full pulse indicates the special resolution of spasm — but nothing regular has been observed in this country of this rising of the pulse. — (Critical Jaundice has been talked of — Jaundice often accompanies the bad fever of W. C.

but critic. Sweat. not easily conceived. ~~sweat~~ That sweat may be critical it must be copious, free, warm, & spontaneous; without stimulating medicines, or increased heat of the body. When it occurs with these circumstances it is often followed by a speedy relief of all the Symptom. Tho this does not always happen. on the contrary we often see full sweats, day after day with no benefit, or even with exacerbation of the Symptoms.

critical Diarrh. presaged by an occasional intermission of the pulse. This discharge happens most frequently in such fevers as arise from crapula. In some constitutions this intermission of the pulse precedes, or accomp. diar. or most bowel complaints. This was the case id. Dr Cullen.

critical vomit. said to be presaged by a hard pulse.

critical flow of Urine has been remarked. so also abscesses have been critical. cough & expectoration have been critical most likely only in case when there was Pneumonica. Phlegmons do occur in some violent fevers as the plague —

As the prognosis in Synocha is much the same as in all fevers, we shall here give the prognosis of fevers in general. —

Prognosis, of Fevers, in general

On this subject Dr. G. follows Lommius, of Brussels, who wrote about 120 years ago; & whose book is the most perspicuous & concise. It contains the result of his own observations, together with those of the most eminent Physicians from Hippocrates downwards.

1. Thong hard frequent pulse from 120 & upwards together with great heat of the skin, indicates the violence of the circulation. This is highly dangerous as shewing a great & morbid irritation. It gives also a great irritation to the Brain, & to the whole System. Hence early delirium - often sudden & fierce delirium or coma - It irritates the nerves & muscles also - hence sympt. of increased strength.

2. Acuteness of hearing, tinnitus, vertigo, denotes irregular determin. of blood to the head, & great irritation of the brain & nervous System. This is also indicated by flushing & turnid appearance of the face, by redness of the eyes, impatience of light, dry parched skin, dry parched mouth, & a diminution of the usual quantity of urine. These sympt. ~~generally~~ found chiefly in inflammat. stage of fever. Lommius was prepossessed with the idea that Synocha is the original primary form.

of continued fever. But the prognosis is equally applicable to fevers of all kinds, and many of them to other diseases —

3. Exacerbations of the febrile symptom while the strength is weakened — or Extreme weakness in a few days: cold, perhaps with shivering occurring in the advanced stage of the disease, & continuing; great watchfulness, or coma or delirium, particularly sudden, fierce delirium. All these symptom both indicate a great irritation, & increase the irritation wh. they indicate. Coma not however so bad a symp. as watchfulness. drowsiness in fever of this country often continues six or seven days, sometimes fourteen, & yet the P. recovers perfectly well. Watchfulness causes a much more hurtful irritation to the system. Indeed drowsiness rather prevents the impression of other irritations, & is sometimes rather a favorable symp. In the beginning of fever watchfulness often successfully treated wh. Opium. — Delirium is always an unfavorable symp. as marking a great excitement of the brain, but in some cases it is not so unfavorable as it has been represented. P. have died who had no delir. during the fever; & many have recovered who had a great deal of it. In general delir. is the more unfavorable in proportion as it occurs early in the disease. If it

occur on the second third or fourth day it is very unfavorable; if not before the tenth it is reckoned much less dangerous. Constant delirium too is much worse than that which occurs only occasionally as when the P. about to fall asleep, or immediately when he awakes. The same may be said of sopor or coma. The more constant the greater is the danger. Yet P. have recovered in this climate, when the sopor almost constant from a very early period of the disease to its solution. The same has happened with regard to delirium.

4. Jaundice occurring before the seventh day of the f. said to be dangerous. This very uncommon here. Drs. seen only two instances of Jaundice occurring in continued fever; both P. died well. It is a much worse symptom in W.C. indeed I gave name to one of the most fatal fevers of W.C. The yellow fever.

5. Rigor occurring before the crisis marks an aggravation of the febrile symp.

6. Loss of voice an unfavorable symptom; but not in all cases fatal.

7. Deafness said to be an unfavorable sympt. But this is in many cases an erroneous prognostic. The opposite state of great acuteness of hearing marks a much greater irritation of the nervous system, & is consequently a much more unfavorable sympt. Deafness may proceed from various causes. It may proceed from pressure on the brain, from effusion into the substance of the brain, & in this case it is highly dangerous. But in general it is ~~rather~~ perhaps only a partial failure of the exp vital, or favorable sympt. & by producing some kinds of irritation it may rather be. One instance in w^h. deafness occurred the P. was soon seized with tremor, subsultus, & died; but this a very extraordinary occurrence & Pain in the neck or back, which is probably from spasm said to be unfavorable. This is a rare occurrence, & seems to imply nothing dangerous.

9. Tremor of the hands when the P. endeavors to take hold of any thing is a very bad sympt. & the earlier it appears the worse, the more violent also it is the more dangerous. This is a very alarming sympt. It is sometimes so great as to shake the bed. It readily passes into subsultus & convulsions, from which few have

recovered. Yet this tremor is not always fatal. One Pt. now a student of Med. had it to a considerable degree & recovered — what seems singular the tremor continued more than two months after the fever was resolved.

10. Squaled appearance of the face, from the contraction of the muscles, seems nearly allied to tremor; & every tendency to tremor very dangerous. Yet the squaled appearance of the face is not always fatal.

11. Great thirst, wh. occurs in most inflam. fevers. The tongue black, the mouth dry, foul & parched; especially without much thirst. This a very bad sympt. It shews a great irritation; & at the same time so great a ~~dep~~ loss of sensation as not to be sensible of it. Thirst gives also a very painful irritation.

12. Peculiar fœtor of the Breath. In all cases the breath is tainted; but often it has nothing of a cadaverous smell; the smell approaches nearer to that of newly turned up earth, in mild fever. But there is in bad fever often a smell which approaches very nearly to that of putrescent animal substances. Sometimes both smells are blended, & in proportion

to the prevalence of the putrid smell the prognosis is bad. This has been ascribed to putrefaction of the humors. The theory has its difficulties, & its probabilities; but there is, at any rate, a state of the fluids which approaches to putrefaction; & in proportion to the degree in which this state prevails, id. is indicated by the putrid smell of the breath, excretions & secretions, the danger is great. — This should be particularly attended to: with the view of obviating the putrid tendency, by keeping the body as clean as possible; by the free admission of cold air, frequently changing the linen, & washing the body in water occasionally. Some P. have none of this smell thro the whole disease. Others have a good deal of it from a very early period of the disease, & the danger seems great in proportion to the earliness of the putrid smell.

13. Hiccup a bad sympt. It is a convulsive motion of the diaphragm, It is often connected with a diseased state of the stom. & intest. Irritation of stom. often produces it. So also Diarrhea sometimes produces hiccup, perhaps by inducing

debility, loss of blood occasions it also from same circumstance. When it follows Diar. loss of blood - violent affection of stom. it would appear most dangerous - Indeed all convulsive motions afford a bad prognosis in fever.

Sometimes General debility produces hiccup. for example Gangrene seems to produce death by occasioning debility; & hiccup generally supervenes before G. be fatal. As in the Gan. that follows lithotomy. As denoting either great irritation of the stom. or great partial or general debility it must be a dangerous symp.

14 Obstinate costiveness. This is the sign of great irritation, & also gives a very hurtful irritation. It quickly contributes to exhaust the strength. & when it continues long says Lommius it is a fatal symp. In same manner Watchfulness both sign & occasion of some very hurtful irritation.

15. Frequent changes of color. These imply an irregular determination of blood to the head, or they may depend on successive relaxation & contraction of the spasm of the superficial vessels. They seem to depend on that state of fever which approaches to intermit. They are uncommon in this country

They are found sometimes in the plague; & are connected with that state of irregular determin. of blood w^h. in this disease gives sensation of cold in one part of the body while there is a feeling of heat in another.

16. Great dejection of mind - the P. being prepossessed from the beginning with an idea of his danger. This is a very bad sympt. It acts as a sedative power in weakening the body, & leads to low delirium - It impairs very much the vis vitæ. Many P. have died in consequence of their own apprehensions, who might have recovered perfectly well had their spirits been supported by the hope of a recovery. Great attention should therefore be given to support the patients hopes.

17. Acute pain in the head is always a bad sympt. in fever. It implies a great determination of blood to the head; & is often to the state of inflam. of head. Sometimes indeed it is found in a state of the disease the opposite of and inflam. Death. But even when it proceeds from the blood. it implies great violence of the morbid affection

of that organ, & consequently gives an unfavorable prognosis. Sometimes headache relieved by Epistaxis, this at the same time renders the bad prognosis, & shews the cause from wh. the headache arose — viz from violent action of the heart & arteries. The discharge weakens this violent action, & relieves the febrile symp. such a termin. in putrid Death. is however far from being favorable — it coincides & expects the debility already too great. Headache has been said to alternate with pain in the bowels — this surely is very rare. There may indeed be metastasis of inflam. state from the head to some other part of the body — but perhaps too much stress has been laid on this. Headache if not speedily relieved produces coma, or delirium. Indeed the violent headache & delirium are very often alternate on another. — Bilious diar. or diar. of any kind may relieve the headache, from evacuating & relaxing the vessels, & thus weakening the force of the circulation.

18 Sometimes there are spasms of the bowels without any speedier bad consequence. Not contractions

or convulsions or pains about the diaphragm & precordia give an unfavorable prognosis. Violent contented pain in the viscera particularly in the stomach - also dull heavy pain of stom. with frequent vomiting, & heat of stom. are extremely unfavorable, especially if they appear early, & impress the P. with a sense of his own danger. This is a common symp. in the plague - much of the febrile irritation may depend on the disordered state of the stomach. This symp. has occurred sometimes very early in the fever of this country without being always fatal. Two p. at present in hospital, had dull heavy pain in stom. one of them to a very great degree, yet it was increased by the least pressure; & yet both P. recovered. This state of stom. seems to imply a low degree of inf. w. sometimes spreads upward; & has been observed from the dull red color of the fauces. Sometimes this tenderness of the stom, & dull pain connected with the irritation by taking in food or drink - yet this case the danger is not so great. If convulsions supervene - if it be connected with headache, or obstinate constipation, the danger is very great.

19. The prognosis drawn from the state of the urine is very uncertain. If it become limpid accompanied with delirium, it marks a fresh accession of spasm, & consequently an exacerbation of the fever. This may perhaps be remarked chiefly at the tertian period. If it become of great consequence that the urine be discharged; & consequently this should always be attended to. If a degree of strangury occurs or ischuria it is extremely unfavorable. This may depend on debility, or some degree of palsy of the longitudinal fibres of the bladder. It may sometimes be got the better of by fomentations, by emolient glysters or simply by raising up the P. The horizontal posture, especially lying on the back is very unfavorable to the passing of urine. With raising up the P. dashing cold water on the lower extremities may give passage to urine. When it will not flow by any of these expedients, or by mild saline diuretics, the danger is very great. The continuance of the urine in the bladder, gives a most hurtful irritation

& consequently when other means fail, recourse must be had to the catheter. The Urine should not be allowed to remain more than 24 hours without being drawn off. Involuntary flow of the Urine sometimes a very unfavorable symp. as depending on Paralit. affection of the Sphinc. At other times when it proceeds from mere lassitude, unwillingness to move, or drowsiness, it does not indicate a very high degree of danger. But from the involuntary flow of it may proceed excoriation, inflam. & Gan. The worst case of Gan. Dr G. ever saw arose from this cause. The os sacrum & tops of the thighs were laid bare; perhaps early Gan. spots appeared in various parts of body; & P. died after lingering 69 days from the invasion of the fever.

20. Lucid appearing in the early stage of fever & not producing a resolution of the disease is a very unfavorable symp. This contrary to the theory of Spasm. If fever depended on spasm the resolution of spasm should

remove, or at least alleviate the febrile symp. But fact shews the bad tendency of such early sweat, & proves the imperfection of this theory. When these premature sweats, w. do not prove critical occur, they are to be checked by cool regimen. If suffered to go on they produce great debility. They are indeed intimately connected with general debility - perhaps they are occasioned by it. In same manner early delirium, or delirium bad prognosis. ——

21 It is a very bad symp. when any part of the body appears palsied. This does not often occur at an early period of the disease. But sometimes, a short time before death we may see a paral. affection of some part of the body; as of one eye. Yet Paral. not always fatal in fev. Some P. have dated the commencement of lasting paralet. affection from fever - that is they recovered the Paral. took place.

22. Fresh exacerbations every third day. This an unfavorable symp; as all exacerbations of the fever are. ——

Fatal Symptoms in fever.

All the following symp. not universally fatal. But they indicate a very high degree of danger at least.

1. Extreme debility, in cases of violent fever, is the chief dangerous symp. But some P. have recovered after they could neither move, nor speak, nor even swallow – but this last symp. has hardly ever been recovered from. When the weakness grows very great the P. can no longer lie on one side, because some muscular exertion necessary to keep this position. He is apt to slip down towards the bottom of the bed – perhaps from some slight ineffectual attempts to keep his position. He cannot change his posture, nor even help to change it. This degree of debility is connected with involuntary discharges.

2. great delirium, connected with rigor, or coldness. This species of deliri. does not depend on inflam. Death, but on the opposite state – sometimes we observe the coldness coming on gradually for a day or two before death.

3. connected with this debility, total loss of speech – this not always fatal – great weakness of muscles appearing in distortions of the lips nose &

face. Especially dimness or loss of sight. Eyes appearing half closed on attempting to speak (from weakness of muscles) loss of sight almost always fatal. loss of hearing very unfavorable in same circumstances. The distortions of face from weakness of some of the muscles not balancing their antagonists.

4. Difficulty of breathing in advanced state of the disease. This a symp. of most imminent danger. Pt. begins to breath hard when his strength is exhausted, sometimes 2 or 3 days before death & sometimes only for a much shorter time.

5. Various affections of the Eyes with debility. Hollowness of the eyes from contraction of muscles. Prominence of the eyes, from inflammatory death. Watering of the Eyes. Rolling, staring, wildness of Eyes dimness of sight, want of motion in Eyes are all symptt. of great danger. Pale or blackish veins appearing in the white of the eye is very uncommon. Squinting, w. depends on paralysis, or spasm of some of the muscles of the eye a very unfavorable symp. to the eye being turned up so that great part of the white appears. but P. have recovered after this symptom.

the white of the Eye becomes red is also dangerous but not always fatal. — Mucous gummy matter appearing about the Eye — foulness of the corners of the Eye — paleness of the Eyelids — connected with general paleness of the face, & shewes the debility & slowness of circul. produced sometimes by the debility that succeeds diarrhea. One Eye appearing less than the other — this may be from irregular determination of blood — but more commonly proceeds from one Eye being partly closed from weakness or palsy of the muscles. sleeping with the Eyes half open — these are all sympt. of imminent danger — but from some of them P. have recovered.

6. Violent pain on the Ear. this indicates inflam. w. may suppurate, but is very apt to communicate itself to the internal parts, & is therefore a very dangerous symptom. —— Even the mere irritation given by the infl. very dangerous — Ears have suppurated & internally & P. recovered, even recovered hearing perfectly

the inflam. of lar more dangerous in the young & plethor. than in the old, because the infl. more likely to spread to the internal parts. Altho the P. may recover the infl. stage, yet the debility thus induced is always to be dreaded.

7. Grinding of the teeth. This is a bad Sym. tho not always fatal. It proceeds from spasm, of the Masseter or Muscles. Ill irregular action of the Muscles from the slightest tremor to tetanus & Convulsion and dangerous. The ind. irregul. spasmod. affection

8. Foulness blackness & dryness of the teeth. these induced by same cause, & give same prognosis, with foulness, blackness, hardness & chapped appearance of the tongue. All proceed from the deposition of thick mucus. Hence the tongue sometimes becomes sore, & has deep chasms which bleed, & cause a difficulty or even a total loss of speech — & this soreness of tongue may continue for several weeks after the fever is cured. This therefore is not always a fatal, tho it is always an unfavorable Symp.

9. Lying or sleeping with the mouth open - this contrib. to produce the former symp. of dryness & chapped appearance of tongue. This is not always a fatal symp. indeed the comatose state w^h w^d it is generally connected, is sometimes rather favorable - at least it is of no great danger. P. have recovered who for the greater part of the fever have hardly been 5 minutes in the 24 hours awake at a time. when they were roused to take drink & medicine they almost instantly fell asleep again.

10. The sudden sense of suffocation. This rarely happens here except just before death. If it occurs at an earlier period, with great debility, fluttering pulse &c it gives a very bad prognosis - or rather a fatal one.

11. Loss of swallowing not from tumor in the throat. Very few have recovered this sympt. The common way of giving a tea spoonful of liquid, not however in fair trial. Many people would have difficulty of swallowing such a small quant. even in health. The previous action of the muscles, as in chewing, is necessary to make deglutition

easy; & therefore P. will often be able to swallow a table spoonful of liquid when they could not get down a tea spoonful. loss of swallowing from tumors in the neck, as from angina is not a fatal sympt. But when deglutition has been lost from debility Dr G has seen only one or two P. recover.

12. Stiffness of the neck, & the head turned to one side - this uncommon. When these sympt. do occur they are to be referred the one probably to rheum. the other to spasm. Coldness of the breath - when breathing quick the air is not long enough contained in the vessels of the Lungs to warm it - this therefore only a consequence of quick breathing.

13. Frequent, small, soft, undulent, confused or intermittent pulse. This generally indicates great failure of vis vitæ. Especially when the pulse from being strong & distinct, becomes weak & obscure. This generally precedes death but for a short time; & other fatal sympt. may be observed

along with it. Yet this weakness & fading of the pulse is not universally fatal. P. have recovered after the pulse gone from the wrist. Quickness of pulse may be very great & yet P. recover – 140 very dangerous degree of quickness, tho 156 have been counted & yet P. recovered. Some individuals have naturally an intermittent pulse, in their best health. & in some of them the pulse becomes regular when fever occurs; & returns to its intermittent state as the fever abates.

14. ~~Insen~~ Insensibility to thirst – this has been already mentioned – Bloody, or black vomit. this sometimes connected with colliquat. diarr. & presages a fatal event. Bloody vomit. may depend on congestion of blood in internal parts, connected with great variability or relaxation of the vessels. Or it may be from obstructions connected with same circumstances. P. young man had got dropsy which was speedily relieved by merc. & squill. as diuretic – ~~the~~ dropsy was beginning to recur, when P. exposed himself to contagion of fever – in 24 hours after appearance of the fev.

the bloody vomit began. & in 36 hours more the p. died. On the abdomen many varicose veins were observed. The internal vessels were much relaxed — & the liver was extremely scirrous. Small, hard knotty — weighing 20 ℔. w. only about half the weight of the liver of an adult. This scirrous obstruction to course of blood, concurring with congestion & relaxation of vessels produced the bloody vomit, & purgeing (for he had both). — Altho there be no repletion the great dilatation of vessels may produce same effect. The over oxidation of stom. connected w. this state of vessels may produce rupture, & consequently bloody vomit. Black vomit may be from blood mixed w. sordes which has been for some time in stom. or it may be bilious. Natural color of bile yellow — w. acid it becomes green, with corrupted contents of the bowels black. — Black vomit indicates therefore corrupted state of the contents of the bowels, & must be very dangerous. — Diarrhea connected w. palp. or pain about precordia, this

very uncommon - may occur just before death - so necessarily always dangerous whether with diar. or costiveness. The fetid smell either of vom. or feces, indicate the presence of putrescence in the alimentary canal & must be regarded as highly unfavor.

15. Black urine, indicates presence of blood which has been somewhere in bladder - bloody urine, from blood recently effused - both indicate a very diseased relaxation, or a rupture of the vessels; & give similar prognosis with blood effused in any other way. Thick, fetid, corrupted urine analogous to corrupted state of other excretions & highly dangerous. Sudden changes of Urine this from change in state of the spasm - marks exacerbation of fever. - Urine thro the course of the disease being the same as in health - this seems to imply nothing dangerous - Pain in the bladder - indicates degree of inflam. & same prognosis as other inflam. - hardness of bladder, most likely shews only the presence of urine in it. - often this can be distinctly felt, in lean P.

16. Picking of the bed cloths &c – This indicates a degree of imperfection in the sight – It arises from the perception of spots on bed cloths, or of flies moving on them &c & shews a partial insensibility of retina or morbid state of nerves. Generally there is also a degree of delir. with this sympt. P. had the perception not of spots but of stripes in a white handk.f – this an uncommon instance of depraved vision.

17. Livid or blackish appearance of the nails or on fingers or toes. This is generally connected w.f coldness of the extremities. This seldom occurs except a little before death. It is connected with gangrenous state of the body. Sometimes this has gone so far that finger or toe, or even a foot has dropped off, & yet P. recovered – when mortified parts begin to separate it is a favorable sympt. This state of body connected w.f languid circulation, & great debility – so is coldness, which generally comes on only short time before death. Sometimes however it appears earlier – the febrile heat subsides

& a coldness which cannot be removed succeeds. This indicates the strength, & the inequability of spasm when (as sometimes happens) one part is hot & another cold - together with great failure of the vis vitæ - it is extremely dangerous. It rarely happens however but it has often been observed as a presage of death in the Yellow fever.

18 Swelling of the abdomen. This from tympanites. the air may either be accumulated in Intestines or escape into the cavity of the abdomen. P. after purge. first dose of lact. Em. operated gently & relieved tympan. but as fever did not subside another was ordered w. operated very violently especially by stool. Next day the swelling of belly proceeded, & the soundness of st. P. died. One or two instances of recovery have been known after the swelling of Abdomen. When the air confined in Intest. implies great loss of tone

19 Strangury & suppression of urine - formerly mentioned.

20 Diarr. w. may be from corrupted matter accumulated in the bowels - If proper laxat. emet. & glyst. administered colliq. Diar. seldom occurs. When these neglected Diar. frequently will happen —

20. Colliquat. sweats, cold, not proving critical. Indicate great relaxation of vessels, & failure of vis vita, other marks of debility generally accompany it. as Deliquium - indicating that the circulation is so languid that when horizontal posture changed the blood is not propelled to the head -

21 - Lying on back & sliding downwards formerly - lying on back is dull a painful posture to bring legs & arms. Indicates that restlessness which proceeds from general irritation - when not from heat it is generally forerunner of death.

22 Dry expty, hard appearance of ulcers - akin to the gangrenous state of body - translations of pains as of Gout or Rheumat. from extremities to body - very uncommon - Gangrene from blister

23. Inflam. Tum. over the ear, parotid swellings, or miliary eruptions, without going forewards. These very uncommon - appeared among soldiers at the siege of Belisle. Surgeon cut into them, & by this practice several recovered. They give a very bad prognosis.

24. Symp. of approaching dissolution or cold sweat from debility - rigor, horror at same time - the facies Hippocratica - nose sharp, skin hard & dry - features collapsed, about temples - paleness or lividness of face, & general cadaverous appearance. All these indicate the total failure of the vis Vitæ.

Causes of Continued ~~fever~~ ~~inflammatory~~ Inflammatory fever.

Predisponent causes. — The inflammatory fever occurs chiefly in youth. It is seldom found in children or old people. Slight infl. affections are common to children. but the continued fever from seven to fourteen days hardly ever found in very young children. Youth is most subject to various inflam. affections as Rheum. Angina; & the continued fever Typhus of Youth has generally more of inflam. symp. at the beginning in Youth than at any other period. The cause of this is obscure - Youth is the period at wh. the infl. death chiefly prevails

Yet the period of plethora, & vigor of the system. & of general irritability. Hence the young more disposed to fever of the infl. kind. & more apt to catch the febrile infection. & when they have got the ordinary fever it shews more of inflam. Lymph. at the beginning.

Infl. fever is also the disease chiefly of the sanguine temperament; & of cold or at least temperate climates rather than of warm. In W. C. fever tends more to putrid death, & intermit. type. In cold clim. to putrid Death. & continued type. Hence they prevail in winter or spring rather than in summer. And in the ordinary continued fever there is a greater tendency to putrid Death in summer, & to the infl. in winter, or spring.

Occasional causes. — 1. Sudden application of cold to the body, if it was heated & weakened before; & especially if cold in that circumstance be permanently applied. This will certainly give various febrile disorders of the inflamm. kind as catarrh, Angina, Rheumat. or pneumon. But a pure inflam. continued fever very seldom, if ever, arises from it.

cold therefore must be considered rather as a partial or accessory than as an occasional cause of inflam. fev. or indeed of continued fev. of any kind. Before cold can act in inducing fev. fr. there must be a previous predisposition to the disease; & in this case the cold cooperating may bring on the disease.

2. Sudden changes in the atmosphere from heat to cold & vice versa.— Merely going from a warm room into the cold air has been said to produce infl. fever. The same account may be given of these as of the former article — A Physician in the whole course of his life will not find inflam. fever produced by them — No he may find other inflam. diseases from them.

3. Suppression of usual evacuations, as of the menses, hemorrh. sputar. even omitting blood letting at the usual time, when the constitution has been brought to the habit of needing it. Pure inflam. fever, seldom arises from any such causes. From suppression of menses an irregular febrile state w. heat strong pulse & other infl. symp. will follow. This febrile state may continue for some weeks, with irregular

exacerbations & remissions; especially with exacerbation at the time of the usual return of the menses. But tho the inflam. symptoms in this case may be very high; yet they do not constitute a regular inflam. fever. The sympt. proceed from general pleth. & irregular distribution of the blood when it is prevented from finding a discharge thro the usual course. — Suppression of milk suddenly will give same sympt. But neither in this case is there pure infl. fev. There is generally topical infl. — of mammæ one of the most violent topical affections which must give high febrile sympt. of infl. kind, on account of the largeness of the infl. Inflam. fever has been generally attributed to suppression of perspiration. whether cold acts merely in this way or whether it be supposed to have a specific effect is uncertain — most likely the former. (Huxham — He pointed out tendency of fev. to prolong death — remarked the distinction of Typhus mitior, & gravior & contributed to introduce the cool regimen in the treatment of fever — yet his notions very erroneous)

Whatever be in the speculations about cold or suppression of evacuations producing pure synch. fever, it deserves to be particularly attended to - that
4 Every thing which gives a great irritation to the system tends to induce the febrile state. The particular causes mentioned above are perhaps all overrated: But there can be no doubt of the general fact, that tho they may not give pure fever they at least give febrile, & inflammat. symp. And hence if they concede with the tendency to fever, they may bring on inflam. fev. Or if the the body has been previously exposed to contagion of common continued fever; or to whatever it be that produces it - especially if the fever has already begun, these accessory causes may modify the disease, & produce strong inflam. symp. at least in the first stages. - Hence mere repletion - great excess in eating, strong high seasoned food - or in drinking spirituous liquors may produce the inflam. Diath. Heating medicines on the appearance of fever have still a stronger effect.

Perhaps the reason why infl. fevers are so rare now is because this absurd practice is given up. There is no doubt but by heating stim. med. the fever may be modified to the Infl. death.: & by continuing this treatment throughout, the infl. Death. may be kept up to the termin. of the disease. The same amount is to be given of violent & fervent, as a cause of infl. fever. The great excitation it gives to the syst may induce infl. state - but certainly pure infl. fev. has very seldom arisen from this cause. Violent passions act in the same manner - strong emotion of mind will quicken the circulation, & heat the body & this if kept up, may increase to a febrile state. Want of sleep has been said to produce infl. fever. from its debilitating effect it should rather give fever of putrid tendency - & most likely it coincides with the predisposition to Typhus - which may begin with infl. symp. from improper treatment or other causes.

Insolation said to produce ~~inf~~ inf. fev. - It gives in different degrees, violent Headache - delirium or Phrenitis & in some cases sudden death. Perhaps inf. symp. may have continued so as to exhibit appearance of continued inf. fev. But this generally from topical affection of head.

5. All those causes that increase general Meth. have been said to give inf. fever. such as high living with little exercise. By increasing Meth. they may give a predisposition to the disease; which concurring with the proper exciting cause, whatever that may be they may induce fever with high inflam. symp.

6. Injuries, whether external or internal - as wounds, fractures, especially compound fractures even severe bruises have been assigned as causes of inf. fev. From the severe irritation these give they may induce the febrile state; & that even before topical inf. takes place. Within 10 or 12 hours after a fracture febrile symp. of inf. kind have occurred; & continued

for several days, the topical infl. did not take place. Same effect may happen from application of caustic, as to bubaes; or from the pain of the toothache - in both these cases infl. does sometimes take place. but the febrile state will be observed before the topical inf. has begun. to a stone in the bladder, when no infl. present has given febrile state.
In general if infl. symp. or febrile state be accompanied with topical pain, we may consider this pain as proceeding from adeps of infl. this should always be kept in view to regulate our practice. Mere pain will quicken the pulse very much in some individuals. A horse may have his pulse increased to double its usual quickness by mere pain.
Infl. fever. has been said to be epidemical in the country. this must be from the general prev. of the causes of infl. death.

In the country men more disposed to fever & infl. symp. than in town - because they have generally greater vigor of body. The best authors do not say that infl. fever is contagious - (see Sir John Pringle - Sydenham)

Consequences of Infl. Fever.

Infl. fev. said to have removed other diseases as convulsions, palsy, Dyspepsia - It is said also to give an higher degree of health than usual after it has gone - & to quicken the growth of young P. - After fev. there is produced a very quick supply of the particles which had been lost during the disease - a good appetite is generally left after a perfect cure; & this is mostly connected with increased health & strength. The same effect is left from fever of any kind.

Sometimes very bad effects have been left from fever either infl. or Putrid. As permanent Mania, Dotism, convulsions, palsy

deafness. These effects are very rare, tho they do happen. Indeed when we consider the violence of the symp. it is rather surprising that perman. injury is not more frequently done to the brain or other organs - particularly by the coma, stupor - delirium tremor & other symp. of violent excitation of nervous syst. Dr G. hardly met with an instance in his own practice of perman injury after fever, except deafness, sometimes; & in a few cases palsy. But that such permanent injury may be sustained is evident. Mr A. G. K. It was proved in his case that occasional derangement occurred after a violent fever in the past winter. Another young P. who for two successive years catched violent fever in St. Judes. the last of which terminated in Dysentery has continued to have violent mania; & at present little hope of a cure. It is not uncommon for delirium to

continue two or three weeks after the fever gone. But in cases where permanent mania has been left there was probably a predisposition to the disease —

Method of Cure in Inflam. Fev.

1 Indication to moderate the violence of the circulation. For this purpose the most powerful remedy is Blood letting. This in the first place removes plethora, & relaxes the vascular system by taking off a quantity of the stimulus. Hence it produces a weaker action of the arterial system; & from its weakening effect it diminishes the nervous energy, by removing the stimulus to the system. It happens sometimes that bleeding instead of lowering the pulse raises it. This must arise from the circumstance that the arterial system was so much filled & distended as to be affected with the quantity of blood contained; & consequently

to want room for farther dilatation - so that the difference could not be great between the Systole & the Diastole - The arteries being too full in their collapsed state - could not admit of much greater distension when the action of the heart propelled the blood into them. When this state of the circulating fluids exists the pulse will be obscure, and on the removal of a Pound or a pound & a half of blood the arterial system will have more room to play, & consequently a greater difference will be perceived between the Systole & the diastole of the artery. - This observed in a most remarkable manner in the case of P. who by natural hemor- lost about 6 or perhaps 7 pounds of blood by Spit. The pulse became fuller & stronger than before & the P. recovered. This is uncommon. But when such cases have occurred bleeding has sometimes not only relieved the Synoch. but removed the fever.

This has been remarkably the case in febrile state which has been induced by suppressed menses. a few hours after the bleeding, hardly a vestige of fever has remained. In such state even a small loss of blood has given a very sensible relief. And if we knew the state of the Patients constitution we might often employ bleeding with advant. when fever & inflt. Symptt. occurs — But as we cannot know this it is proper to be very cautious in bleeding. Pr. seldom used bleeding in continued fever, & these only when the inflt. Symptt. violent. & these cases were not generally fortunate. sometimes however two three or more bleedings have been necessary in the case of continued fever of this country with high inflamm. Symptt.

2. The violence of the circulation is to be moderated by cooling purges; as Glaubers Salts.

soluble Tart. Soda Phosph. – all these are nearly on a level in point of efficacy, tho some Phys. give a preference to some one of them above the rest. These operate not only by evacuating speedily & effectually the intest. canal; & removing the irritation from accumulated feces; & also by cooling the body – tho the mere evacuation of the bowels is of great importance, they have a further effect – they produce an evacuation from the vessels which open into the gastrelimes & thus reduce the rapidity of circulation – & P. may be weakened even to deliquium by effect of cooling purges frequently repeated – they alter, in this manner the determination of the blood; & by producing a greater flow to the aorta descendens they weaken the impetus to the carotids – thence they lessen tension, headache, or delirium, or even Phrenitis. In Inflt. fever purging by the gentle saline laxatives is generally safe. But if any objections should be had to purging Emolient Clysters should not be neglected. These will both empty, relax & stimulate

the lower intestines.

3. The violence of the circulation is to be moderd. by refrigerants & diluents. Cool drink & cool air may both be freely applied. Various articles may be mixed with the drink as refrigerants. as acids, particularly vegetable acid - thus grateful to the taste - saline neutrals. Of the saline medicines Nitre the most powerful as refrigerant. 5 to 10 gr. Some stomachs do not easily bear it, but if properly diluted it may be taken in considerable quantity in the drink. 10 gr. of Nitre to ℔j of liquid. & given in small quantities frequently repeated. Great stress has been laid on the theory & practice of dilution in fever. Cautiousness must be taken not to load the stomach so as to produce nausea. This is the chief thing to be attended to. As to various & nice articles as infusions & decoctions they should not be employed. they soon produce a loathing & prevent the P. from taking enough of liquid. Water has been said not to mix properly with the circulating fluids hence Mucilaginous

or as some call them saponaceous substances have been used. Mucilaginous substances seem preferable to mere water, because they give some slight nourishment and because they may come with the circulating fluids. The articles barley water &c mentioned under Prob. are the best. Sugars & syrups do harm by loading the stom. Mild acescent fruits &c may be used with advantage.

2 Indication — To take off spasm & promote sweat. This indication is best answered by bleeding, purging & delution but other pieces of practice may also be employed. Emetics to keep up nausea for a considerable time — for this purpose antimonial preparations most effectual. But very bad effects have followed the exhibition of antim. used in high inft. stage of fever. Bleeding should therefore be premised. The nauseating power of tart. greater than that of any other emet. If therefore the P.'s strength capable of bearing the rough operation of Tart. it will often cut short the fever.

All the prep. of Ant. have nearly same effect
James's Powder the most common form. They
produce nausea, vomit. purgery & sweating. If
they do not cut short the fever they often break
it down. This effect is probably more from the
shake they give to the const. than from any
specific febrifuge power. Sometimes the nau-
sea has been kept up for a considerable time
for two or 3 days — this surely is rough practice,
tho it was often followed by Dr Cullen.
But this has seldom answered expectation.
The good effect was generally at the begin.
when repeated they soon lose their effect,
& often seem to increase the symp. I
never used them but at the beginning
of fever. after the fourth or fifth day
there is little chance of cutting it short.
tho they may render it milder. But
if the fever has continued longer, & in-
duced much debility they do harm
often — & unless when there is naturally

nausea no emetic is safe - when there is nausea the slightest emet. as infusion of Camomile, or Ipecac. wine may be given to clear the stomach. Cases however have occurred in which emets. have broken force of the fever when it was far advanced, & the P. in great danger - but in this state of disease they are generally dangerous - Many have died under the operation of James's Powder. Dr Goldsmith was an instance of this. Yet one may practice several years before such an instance occur. But the knowledge that such instances may happen should make us cautious in the use of a remedy that may have fatal effects. - Dilution is antispasmod. & diaph. especially w. acescents, vinegar whey &c But all heating stimulant sudor. dangerous. even opium is hardly to be attempted. - Warm or tepid bathing, or fomentations have been recommended. Sometimes these have had good

effect - they may bring on a sweat, but this sweat thus brought on seldom brings any remission of the fever. They have induced sleep when P. formerly wakeful - but all their good effects are more than counterbalanced by the increased heat. Heat however produced fever a most hurtful stimulus in fever.

3 Indication - removing or preventing topical inflammation, particularly in the head. - For this purpose topical bleeding, by cupping & scarifying. This is often safe & proper when general bleeding could not be safely tried. But seldom see the operation well performed. In an unskilful hand the cupping may bring off but very little blood, & give the P. great inconvenience. A skillful operator may take away almost what quantity of blood he pleases from a Pound to a pound & half - This will often be of very great service. but from the difficulty of getting the operation well performed it is less used than might be

Cupping of great use in removing without symptoms of 1607 Head
as compa delirium &
Leaches a substitution in such a case

If marks of rapid circulation in the head, blistering has been recommended. But the benefit in this case seems to arise more from shaving the head & keeping it cool than from the blister. If blister to be applied head should be shaved perhaps a day before blister laid on. There will generally be some slight cuts made in the shaving, & these absorbing the cantharides will be apt to produce strangury. Shaving & washing the head w. cold water will generally give all the benefit that can come from blister. If however blister thought necessary it will do no harm.

Pediluvium may have a good effect by drawing the blood downwards, so keeping the body open either by cath. or lax. clysters.

Peruvian bark has been recommended — what effect this can have, unless the fever has somth. of Intermit. type is difficult to be conceived —

168, Mercury has been recommended from 5 to 10 gr. of calomel may by purging smartly allay the symptom. but it seems to have no superiority over Glaub. salts, unless in the case of admeasurement, on which account it may be convenient for children.

Authors on this subject Lommius, Sweden. Sydenham & Drummond's theses — Sir John Pringle & Dr Donald Monro.

Of the Common Continued fever of this country.

The continued fever of this country is of one genus, tho it assumes a great variety of modifications, which have been distinguished by different names. Typhus & Synochus those of Dr Cullen. Modifications of it have got the names of Putrid fever - Nervous fever (Typhus gravior & Typhus mitior) Jail fever, Yellow fever &c

It is accompanied with various accidental symptoms in different cases. It may appear with or without an overflow of the bile; & consequently with or without disease of the stomach & bowels: With or without Petechiae. With or without hemorrh. from nose, mouth lungs &c - with or without remarkable fetor. In some cases there is only the pure febrile smell resembling that of meat turned up earth. In others there is high fetor or cadaverous smell. It may occur with or without

abscesses or swellings of the carotides, or buboes: With or without a gangrenous tendency of the body - It is modified also by the season, by the climate, by the situation - It is often worst in towns; & generally most violent in Gaols, hospitals, ships, camps, barracks. In these cases the crowdedness of the places seems to give activity to the contagion. 1750 Contagion was brought into the old Baily by a prisoner - or rather from opening a door of one of the cells. - The stream of air made by opening a window directed the contagion to one part of the court. & those who were exposed to it almost all catched the contagion; & almost all died - The other part of the court suffered nothing. - It is modified also by the air according as it is kept in good or bad air. by moist or dryness of atmosphere - by evacuations & treatment of it. - All these varieties may occur in the same epidemic, even in the

same P. at different times; or variously combined or succeeding one another — the cause, & the manner of cure is the same in all. But Phys. have recorded & described the extreme cases as different species — the above circumstances however shew that they are only accidental varieties. Neither cause nor manner of cure are the same with those of intermitt. & thus establishes a specific difference between Int. & continued fevers.

Typhus Mitior, called in this country, nervous fever, or slow fever, or low fever first accurately described by Dr Gelchrist of Dumfries — who his description merged with much theory — Gelchrists observ. may be found Ed.r Med. Ess. 4 & 6 vols 1735. Huxham wrote about same time on same subject — copy his description of Typhus mitior & gravior

Diagnosis.

Between Synocha, or inflam. F. & Typhus, the diagnosis is easy. In the Infl. Feb. the invasion is more violent & sudden, there is more strongly marked rigor, greater frequency, strength & hardness of pulse. The Symp. often become violent in the course of a few hours. The thirst is much more urgent, the heat much greater, the tongue dry, the urine red the breathing quick, there is great anxiety (these two symp. generally relieved by bleeding, & the blood exhibits the buffy coat) there is less prostration of strength, & depression of spirits; & often topical pain. The cause also exhibits a diagnosis, Infl. Feb. from cold, excess, plethora violent passions &c – if the P. had been exposed to these, & the symp. above mentioned succeed we may regard it as Synocha.

Typhus may be distinguished by knowing that the contagion exists, & that the P. was exposed to it. The constitution & manner of life will also give a diagnosis – if P. of a sedentary occupation &c – at any rate the circumstance

being exposed to contagion, together with the characteristic sympt. of disease, sufficient to distinguish Typhus from Synocha, tho they may not distinguish the Typh. mitior from Typh. gravior. Indeed this distinction is of no consequence as the method of cure is the same in both. In general the sympt. of Nervous or Ty. Mitior much milder than those of Ty. gravior. tho the sympt. of debility may be equally strong in both. ~~Both are characterized~~ Nervous fever has less heat less strong pulse, less thirst, less nausea & vomiting, less bilious tendency - less of pelor, of tremor, no dark colored urine: & both have less of some of these sym. as heat, & strength of pulse, & redness of urine than Synocha ephebis - there is no headach. nor petechiæ in nervous as in fluxed fever. Altho the extreme cases may easily be distinguished; & altho it be important to be acquainted with the theory of the extreme cases; yet the two varieties run so into one another, that it is often impossible, as it is always of but little moment, to determine to what variety it belongs.

Prognosis.

this is always uncertain. the danger can never be judged of from the early sympt. Typhus is always a disease of danger. the sympt. may be mild at the beginning, for the first week, or even longer & yet by the middle of the second week they may become most urgent & alarming. the fever will sometimes take sudden unfavorable turns which could not be foreseen from any previous attention to the sympt. P. who had been sent to Hosp. for gonorrea Virulenta caught the febrile contagion. He was treated with antimon. tartarized, & the sympt. were much relieved. next day he put on his clothes & was talking with his mother, lying on bed; when sudden convulsions occurred & carried him off. Similar incidents occurred to Dr Monro. A farmer in the country who seemed to have no urgent sympt. Pulse was not very quick & Dr had prescribed - but before leaving room he thought of feeling the pulse again - It had changed very

much & P. died within half an hour. Should remember that such sudden turns may occur. They are however uncommon; & to compensate we often see P. recover when they seem on the point of death. So that hardly any mildness of the Sympt. can warrant our being too secure of a favorable issue; & hardly the most urgent sympt. of danger should make us despair & remit our endeavors. In some seasons the disease is much milder than in others – sometimes very few bad cases occur, & sometimes a great many from 93 to 94 Dr G. saw about from 70 to 80 P. in continued fever. of these not one died of the fever & only one of the gangrenous state brought on by the fever – In other seasons he has lost two clinical P. in one night. In situations where people much crowded as in jails ships &c it is not uncommon in bad epidemic to lose one in 6 who catch infection. More fatal to the poor than to the rich, from their way of life. Of P. who are properly treated from the beginning sometimes not one in a hundred will die. At other times,

notwithstanding the utmost care, very few will recover. This was the case of the Jail fever at Oxford, about 1577 in reign of Elizab. It was brought into court at the assizes, called from this fever the Black Assizes & in a very short time 200 died of the fever in Oxford, & 200 in its neighborhood.

Sympts. that denote a favorable issue.

1 Commonly the first favorable symp. that appears is the tongue growing clean & moist, from having been dry parched & encrusted. This symp. may often be noticed when no other perceptible change has taken place in the general symp. It sometimes appears about the beginning of the second week, or before the end of it. The cleanness of the tongue first appears about the edges, which become red while the middle continues black & encrusted. This symp. is sometimes attended with spittling; & sometimes not. — It denotes denotes a restoration of the natural secretions, perhaps by resolution of the spasm; & a beginning amendment in the state of the stom. There is certainly a great symp. between the stom. & the mouth, & indeed between the mouth & the whole of the alimentary canal. — Along with

this symp. there is generally a lessening of the thirst, & some degree of returning appetite. Sometimes also it is attended with a warm, gentle, free, then sweat coming out naturally, without increased heat by foment. or relaxing, or hot stim. medicines - This is by no means prevented by the cool regimen - It appears about the fourteenth day - sometimes earlier as the 11, or 9 or even earlier. But while a sweat of this kind, & accompanying the former symp. gives a favorable prognosis early profuse sweats; or clammy or partial sweats are generally colliquative, & give a very unfav. prognosis - They should therefore be checked gradually. From such sweats proceeds the miliary eruption - They are generally the effect of bad air & improper treatment.

2 Another favorable symp. is gentle bilious diar. particularly if it be attended with a gentle sweat. This is often critical. It relieves the affections of the head as headache, coma, delirium; & makes the pulse fuller.

3. Copious flow of urine in the advanced state of the disease - especially if herbid thick urine; with a copious sedement. It indicates resolution of spasm. For

this country it is not common - tho it has occurred. P. brought to the Infirm. with tremor, subsult. collapsed features; & general unfav. symp. - thought to be so bad that he would die in a few hours - a great flow of urine occurred & was completely critical.

4. Abscesses, as Phlegmons of the Parotids, or conglobate glands - or buboes. These are critical in the plague, tho carbuncles are not. But in the fevers of this country they hardly ever occur. They have proved critical in some of the worst Typhi of W.C.

5. Spontaneous miliary eruption - very uncommon here - unless induced by hot regimen - Not much to be relied on, as being merely symptomatic. Fiery red rash on the back, watery bladders on shoulders - both very uncommon. Perhaps called favorable from the theory of morbific matter in fever wd. must be expelled before P. can recover. Petechiæ also are merely sympt. They do not indicate a putrefaction of the general mass of fluids; nor are they always fatal. They are least dangerous as they are more of a red color; & the worse the more dark they appear. It is generally a favorable symp. when, from being dark, they

change to a red color, & then grow yellowish. Yet by cool regimen this change has been brought about in the appearance of the Petech. & the issue after all been fatal.

6. It is a favorable Symp. when Delirium is long of appearing - when it does not appear till the 7 8 or 10 day - this marks mildness of the fever. It is also favorable when the degree of deler. is not great. In general the earlier del. appears the worse, & the stronger it is the worse; & vice versa. Yet some have died with no deler. & others have recovered who had a very high degree of it.

7. Deafness a favorable Symp. 19 of 20 who have this Symp. recover. Same may be said of sleepiness or drowsiness, as opposed to coma. When there is only that degree of stupor from wh. the P. can be roused; & when he is sensible enough to take food or drink, & answer the questions put to him. Complete coma from whence P. cannot be roused is a very unfavorable Symp. Both deafness & stupor are much more favorable than the opposite affections of great acuteness of hearing, & watchfulness.

8 Another favorable symp. is wine agreeing with the P's stom. refreshing & supporting him, & keeping the pulse full. When this is the case we can almost promise on keeping up the P's strength till the crisis arrive - In such cases wine will demonish headache, & even delir. & this shews that there is a kind of delir. wh. does not depend on inflam. state in fevers. - One of the most distressing circumst. is when P. cannot be made to take wine - when he loathes it - wine certainly the best cordial, but in such circumst. we must supply the place of it by french, warm aromatics, or whatever we can get P. to take -

9. It gives also a favorable prognosis when the P. has been well treated from the beginning. If he has been kept in good air - had mild purges, kept clean; & in general been treated in the cool regimen. Most P. would recover by this treatment with only cold water as their drink. Whereas, by a contrary treatment, being kept hot, in foul air, dirty &c the symp. are aggravated beyond what could easily be conceived. By bad treatment the fever will make more

progress in a day or two, than under good treatment it would do in 10 or 12. In 1792 P. had been treated amiss for 36 hours - he lay in foul hot air - in a bed in the wall in a house partly sunk below the level of the street - The Symp. were most alarming; the pulse was 150 an irregular. On being brought into proper air & kept cool the pulse fell to 120; but the fever had made too great progress to be stopped & the P. died.

10. The general mildness of the Symp. may be ranked among the favorable prognoses. If the pulse do not rise above 120 - if it continue full, regular, & of a proper strength - If the heat be mod, the thirst not great - the affections of the head & stomach not urgent. If there be no fetor - no peculiar palness - no irregular motions of the muscles - no peculiar affections of the eye - No change or loss of voice. To these may be added the Symp. becoming milder than they were before. pulse becoming full from having been weak & slower - Mouth becoming clean & moist - thirst going off. Appetite returning - & sleep becoming natural.

There is seldom any return of appet. till the P. considerably amended. This however may not be observed in the pulse or general symp. From this circumstance it has happened that many particular kinds of food have been said to cure few. The truth is the P. was cured before, & the appet. for food was only a consequence, not the cause of the disease going off. — In such circumstances we should warn P. not to force themselves to eat. But if they long for any kind of food, it is not worth while to thwart them — If it be heavy indigest. food they will soon tire of it, & have recourse to what is lighter & more proper — by refusing it they seek for rec. might prevent their taking what is necessary. Convalescent P. asked for his mutton — This was instance of the disease being removed, & this not appetite returning as consequence of it.

|| The return of sleep after watchfulness — skin growing cool & soft & moist — These are universal symp.

Symp. of Danger –

1 Debility – these are easily observed. 2 Putrefactive tendency – 3 Topical affection – chiefly of the head – also of the stom. bowels, & lungs. There has often been inflam. Sup. & effusion into the brain – also into other parts. But in general there is no great danger from the prevalence of Inf. Dis. as Typhus. – There may however be inflam. of a low kind in the head, in the stom. in the bowels, in the lungs as has been shewn in dissection.

1 Debility may be either of the nervous system – of the sanguiferous syst. or what is still more common, of both together. The same occurs in many febrile diseases, as measles small pox &c as well as in continued fever. That that two species of debility may exist separately is proved by this that there may be great strength frequency & hardness of pulse along with symp. of great debility of the nervous system & conversely debility is indicated by feeble small, compressible pulse – when you can easily depress. – They verge on erect posture, or great tendency to

deliquium on the erect posture - by the breathing being quick & laborious when there is no topical affection of the lungs - by the voice becoming feeble, or changed in its tone - or by the loss of voice - by lying on the back, & slipping down to the bottom of the bed - & by coldness of the extremities. With these symp. there is generally cold clammy sweats - from relaxation of extreme vessels - & change of the counten. is from a want of the due distribution of the blood. of the countenance, paleness, sharpness, length, relaxation, & shrinking of features so that the face is so much altered that the P. can hardly be known. The eyes change - they become fixed, they lose their vivacity, become dim - this almost always a fatal symp. - There is often double vision, or squinting of the eyes - indistinctness, or wrong notices given by sight, or total blindness - all these are almost tho not altogether fatal. Blindness sometimes proceeds from mere debility - as in Phth. or in debility from Gorge. - Loss of deglutition - Early permanent & violent delir. Coma from wh. P. cannot be roused - or total want of sleep. Tremor, subsultus - convulsions in hand, limbs tongue, inability to push out the tongue

sometimes there are general convulsions - an evident fit of epilepsy - sometimes only partial - those of the face often exhibit a most frightful appearance - they have been subdued by opium once or twice, & yet they have recurred & proved fatal. — Frequent weak small pulse - irregularity of pulse - very slow pulse, which is commonly attended with stupor or coma. There have been instances of the pulse coming down to 60 in a minute while the other symptoms remained unabated - these states of pulse indicate compression of the brain. Very slow, or very quick breathing. Insensibility to all stimuli, except sometimes to sound. Total want of secretions, or excretions; or excessive colliquative evacuations. - Suppression of urine with dry skin dryness of mouth - involuntary discharges by stool or urine - when these from palsy of sphincters they are fatal. Sudden change of urine from high colour to limpid - Excessive viscidity of mucous secretions from the membrana Schneideriana. If as this viscid mucus clustering in the throat nose & mouth that produces rattling, wheezing &c. in

breathing — foaming at the mouth — this seldom occurs but just before death.

2. Sympt. of Putrefactive tendency — shewn by fetor of secretions & excretions — Aphthæ either very dark & brown, or else very opaque & white. These con nected often with hiccup, & indicate diseased state perhaps an ulcerated state of the stom. & intestines. Petechiæ, maculæ or blues — the darker the worse — these are nearly connected with the gangrenous state of the body, which appears on those heads that have been blistered or compressed, or any way excoriated.

3. Symptoms of topical affection as of the head — indicated by delirium, coma — strabism. & starring of the eye &c — of the stomach ~~or bowels~~ by nausea vomiting, pain gripes fetid stools &c — of the lungs by pain, difficult breathing cough &c — of the kidneys or bladder by pain, dark fetid urine — of the bowels by diarrhœa, costiveness, hard swelled belly &c — ~~Profuse sweats~~ ominous early & followed by rigor. — also All sympt. that indicate effusion, congestion, or irregular determination of the blood. —

of the Cause of Typhus.

The common continued fever of this country is the disease of youth from puberty to 35, rather than of other periods. Very young people seldom labor it, & very old people rarely have it. To this however there are exceptions. In youth there is a peculiar irritability of the system, & as it predisposes to fever, may be termed the febrile irritability. It is said to affect people of flaccid relaxed habits rather than those of more robust make & firmer solids - This also admits of very numerous exceptions. The same may be said of General debility as a predisposing cause. Phthisical people hardly ever get this fever - & dropsical P. very rarely, tho such P. labor under the greatest of all debility, while the strongest people are sometimes cut off by it. Great evacuations, whether natural or accidental are said to predispose to the disease.

There is certainly something real in this as a predisposing cause of Typhus. Poor low diet acts in the same way, so does unwholesome food. The connection between poor living, & living on unwholesome food with Typhus is shewn by the relation that has been observed between famine & pestilence - or such bad fevers as have got the name of pestilence. An instance of this occurred lately at Naples. The effect of famine, both from the quant. & quality of the food is to weaken the vascular system, & generally the whole constitution. Previous diseases, particularly previous fevers dispose to catch the contagion. Depressing passions have same effect, as fear, grief, anxiety; & particularly the apprehension of catching the infection. Immoderate study, or intense application to business, especially a sedentary life after one has been accustomed to an active one. Perhaps on this principle so many students catch the fever. Watching, which generally implies sedentary life - either at amusements

or study. Warm climates are said to predispose to the disease. This may be owing to the observation that the intermit. of w.c. tends to a continued form. In this country it is said to be connected with a close warm damp state of the air. This may give the fever the fewest inflam. symp. But in this place fever prevails most in the winter. Perhaps however this may be partly owing to the common people in winter keeping their houses more close & warm than usual, & seldom or never ventilating them. The air must in this way become foul.

The occasional causes have been supposed to be more numerous than they really are. Many causes w.d have been assigned certainly do not produce typhi, tho they may predispose to the disease. Cullen's notion that they proceed only from contagion or at least from human effluvia if not entirely ascertained is at least highly probable.

From the time of Willis & Sydenham, a certain state of the air has been supposed necessary to spread the contagion. This peculiarity is not confined to Typh. many other febrile contagions are subject to the same rule. From the practice of innoculation the small Pox is never completely out of great towns but it is only sometimes that they become epidemic. In general it is impossible to make them epidemic. but when the state of the atmosphere favors the propagation of the contagion it is impossible to prevent their becoming epidemic. The same may be said of the measles; of the infectious catarrh & especially of the plague. This disease is brought into constantinople perhaps 20 or 30 times in a year — yet it becomes epidemic but seldom. 20 years have elapsed without its being epidemic in constant. When the state of the air has favored the contagion it has broke out at once in its almost virulence. Populous cities have been laid waste by it

in a few weeks. In 3 weeks time it has cut off 300 000 people. From the moment of its appearance it has been at its greatest virulence - almost all who were seized with it died - as the Epidem. spread it has become less noxious - when the greatest number was dying the proportion of those who recovered has been greatest; yet it went off most who took it have recovered. The virulence seems to have depended on that state of the air which was favorable to the contagion. The last time the plague appeared in London it broke out with great vol. 2000 died in one night; & 4000 the rest of that week. But it appears that the plague will neither live in great heat nor great cold. For in London it disappeared as the cold of winter came on - In Russia tho it has often been introduced it has never continued long; & at Cairo it stops as the heat of summer advances.

Typhus seems to have the same dependence on the state of the air. Some seasons very few fevers are found – others it is much more general.

Cold, depressing passions, errors in diet &c which have been assigned as cause of continued fev. seem to have been considered as such from theory rather than observation. Putrid effluvia from animal or vegetable substances liable to same objection. The body of a whale thrown ashore & putrefying has been said to give rise fever in its neighbourhood. It is said also that in Cork at the time of slaughtering of cattle, when in a short time 120000 cattle have been killed, the disease has been prejudged from the putrid effluvia; & from the common people at that time living too much on animal food. Yet those who are most exposed to putrid effluvia as butchers, naturalists &c do not from this circumstance catch the disease. These circumstances may have an effect in

predisposing to fever. But the chief occasional cause is either contagion or ~~human~~ human effluvia from the living human body, collected & corrupted. That the effluvia of the healthy body may produce the disease seems proved by this that cleanliness in ships of war prisons &c prevents the disease; while want of cleanliness makes it break out often in the most virulent form. That fever has not been more universally ascribed to effluvia or contagion appears to have proceeded from the two circumstances that Physicians entertaining wrong notions of the cause of the disease were led to neglect tracing the contagion; & that the contagion often cannot be easily traced. Person may catch the contagion & yet the disease not break out for a week or more after. Yet however very unlikely that the same effect should be produced by so many different causes as have been assigned to contin. fever.

It is not necessary to be in contact with the person in order to get the contagion. It may be conveyed to some distance - as a few yards - tho it is not likely that it can be conveyed to any great distance as of some hundred yards. In such circumstances it would probably be either rendered so thin & weak to affect the body - or it may enter into chemical union with some other parts of the atmosphere & so become innocent. It may be conveyed by clothes - it may be contained in clothes for years - some with S. Pox. In this way S. Pox was conveyed to America. The nature of the contagion is hitherto unknown. We have reason to believe that a wonderfully small quant. of contagious mat. may give the disease. 1/2 grain of matter from a pustule of the S. Pox will poison 3 or four lancets: & each of these lancets will give the disease to 3 or 4 P. Of this small quantity the greater part is only

common fever, & only a very small fraction of it can be supposed to be real infectious matter. Hence we may form an idea of the extreme subtlety of contagious poison. It is analogous to other volatile matters. — M. Boyle gloves that only touched Musk retaining the scent for 30 years — all that time they must have been giving out the odorferous matter.

It is probable that the contagious matter of fever is somewhat of this kind. Whether the peculiar smell of fevers be one of the sensible qualities of the contagious matter is not easily determined — but in most cases they can be distinguished by their peculiar smell.

It is not easy to assign the distance to which the noxious matter may be diffused. But it appears to grow less active as it recedes from the centre from wd. it proceeds. In the Plague the cutting off of all communication will prevent the infection from spreading from one street to another. Even the walls or the tops of

the houses which divide one flat roof from another the not more than 6 or 7 feet high will stop the progress of the infection. — Putrid effluvia mixed with contagious seems to make poison more active. Fev. is most virulent in low dirty houses crowded places where cleanliness is neglected.

Contagious effl. adheres to various substances perhaps to all bodies, & grows noxious in proportion to the time it has adhered. Woolen stuffs, bale goods beds, carpets, curtains will retain the effluvia a long time. From opening of bale goods in wd, the infect. matter of plague contained, people have been suddenly killed by the contagion. Care should therefore be taken to remove every thing of this kind; or at least to purify them by washing fumigation &c — The walls of a chamber will even retain contagion for a considerable time. Some instances have occurred in which the fever could be referred to no other cause but living in a chamber in wd. P. all of Typhus had been

a year before - the house had not been occupied between the two instances of the fever. Therefore walls should be white washed - the contagion adheres very strongly to the decks & sides of a ship. No washing or scraping will drive it away. Even fumigation in the ordinary way has sometimes failed. Fumigation the most effectual method of purifying ships - burning Calthum, aromatics sulphur, arsenic, tobacco &c, deflagrating gunpowder between decks has had a very good effect - Capt. Cook used this method. Steams of vinegar, or other acids. Quicksilver, common smoke. perhaps one reason why fevers not more common in low dirty houses is that the smoke of such houses are generally filled cures the head effluvia. Ventilation & washing in ships will often fail of driving away the contagion.

Contagion is less infectious as persons have been more used to it. Persons long exposed to it people grow almost incapable of being affected by it. Hence Phys. & nurses seldom catch it. It is reckoned a proof of extreme virulence when they are affected.

Prisoners, long in jails & exposed to contagion have communicated the disease to others when they have not been affected by it themselves.

Altho contagion most noxious when accumulated & retained in fomites, it is often extremely active even as it issues from the diseased body - Even when it does not give fever it sometimes produces very violent effects on the system, as vertigo headache &c

Phys. & should beware of needlessly exposing themselves to the contagion by staying long in the Pt's chamber - hanging over the bed to ask many questions (wh is also disagreeable to the Pt.) & especially by sitting on the bed. In the clin. ward & Med. Stud. caught the infection in one night from this circumstance - The Pt was a woman uncommonly beautiful, & the students attended too much to her -

Morbid dissections -

These are extremely unsatisfactory - They shew only effects of the disease; & these too accidental effects, as inflam. suppur. gangr. &c - but they give no insight into the nature of the disease.

Method of Cure.

Dr G. follows Cullens first lines - abstracting from the Theory, these are highly judicious. General plan of cure formed on "Obviating the tendency to death" - Many circumstances may occur in fever to cause death: & if we can obviate the effect of these circumstances so as to keep the p. alive till the fever has run its course, we are almost sure of effecting a cure. The fever may in some cases be cut short by

remedies before it has run its course - but in most instances this cannot be done, & consequently nothing more can be effected but obviating the fatal symp.

The three indications of cure are 1 - to moderate the violence of the reaction as Dr Gregory terms it - 2 To remove the causes, or obviate the effects of debility - 3. To obviate or correct the tendency to putrefaction.

For the first of these every thing that diminishes the action of the heart & arteries may be employed - & whatever takes off the spasm of the extreme vessels. - The first of these is universally expedient - the latter seems hypothetical, as it is not probable that spasm is the chief cause of the febrile symp.

The action of the heart & arteries is to be diminished

1 by avoiding or moderating those irritations which are almost constantly applied to the body. Many stimuli are constantly applied

to the body as light, impressions on the senses — exercise food. These necessary & salutary to healthy body but extremely hurtful to the diseased fervid fancy conversation thought & pleasant in health, but very hurtful in fever. They may induce delir. & often when P. has been much employed about any favourite subject, he will rave only about that. All these stimuli should therefore be avoided — all impressions on the senses to be guarded against as much as possible — P. should not lie in strong light, tho absolute darkness may be apt to induce depression of mind. Noise should be as much as possible avoided. If it cannot be done otherwise the P's ears may be stuffed.

Best of all stimuli heat is the most hurtful in fever. whether it be applied by bed cloths, fires, fomentations &c —

The cool regimen should not be begun in the cold stage of fever, but it should never be delayed after the hot stage has formed. Few bed cloths should be employed. In winter not more than one blanket, in summer only a sheet generally men coolness of more consequence than all other remedies. The P. will not be worse the second week than without cool regimen he would have been the first.

All irritation produced by exertion is extremely hurtful in fev. Angina, & generally in all febrile affections. Speaking should be avoided. In the weak irritable state which f. induces, this gives a very hurtful irritation. Reading for amusement also irritates the nervous syst. too much, & is apt to induce delirium. All violent emotions of mind have still a worse effect. Hence the propriety of not telling to P. any thing that might interest them - or in general of not talking to him at all, as the mere effort of listening gives hurtful irritation, tho answering to questions be not required. - Only one exception to this

In approaching Del. it may tend to prevent deler. if agreeable objects & those P. used to be presented to his senses. The impressions made on the senses in the day time sometimes keep a P. sensible, while the absence of ordinary impressions is attended with Deler. during the night.

The presence of recent aliment always proves stimulant, & is therefore to be avoided. While the fever continues very little food is necessary; & there is hardly even any appetite for it. The digestion does not go on, & consequently food loads the stom. Even if digestion went on ~~the~~ the food is not assimilated - it does not nourish the body. But when fever draws out to a great length then will be a return of appetite - & the body must be supported. The danger from abstinence in fever is rather a danger from debility, which food will not remove. When we give food it should be of the lightest kind. Broullons generally hurtful rather than

useful except when fev. of great length, or when it has taken a favorable turn. The lightest veget. substances better - Gowens. Panado, Boiled barley-rice milk or rather milk & water - plain new milk, heavy rather heavy - Butter milk, Whey - acido dulcis fruits grapes, oranges, strawberrys, Apples - Mucilaginous waters, as barley water or Tea, Small beer. The sense of thirst gives a very painful vocation & therefore is by all means to be obviated. Drinks may be acidulated with lemon juice or vinegar. All medicated drinks to be avoided as being too disagreeable to admit the P. taking enough of them to subdue thirst. Honey & Syrups in the drink have the same effect. No bad effect can arise from small beer, unless it purge, in wh. case it is to be given up. Water with a little wine in it may be safely given even in the beginning of Ty. as the fever advances wine may be given much more freely.

must have variety of drinks, as P. soon tires of any one.

should remind P. to take drink frequently.

Sometimes thirst cannot be subdued - This from state of the Hom. & suggests the necessity of

removing another very hurtful stim. condition in the stom. Generally an emetic or two is necessary in the beginning of fev. If stom. much loaded we may use an active emet. Ant. Em. But these sometimes hurtful, & the milder emet. as Ipecacuan. will generally be sufficient. When there is nausea & oppress. flushing it with camomile tea will be sufficient.

Another hurtful irritation to be removed is costiveness. sometimes the opposite state of the bowels, is present, but in by far the greater number of cases, cost. continues almost thro the whole of the disease. Cath. by the mouth are uncertain in their operation, & they are too long of operat. sometimes they do not operate at all, & at other times they oper: too violently. Hence mild Glysters preferable. should be given every day or at longest every second day. The removing the irritation from accumulated feces prevents almost certainly colliquat. Diar. in the later stages of the fever. If cathart. by mouth deemed necessary the mildest only to be used. In case occurred

in 2d. a few years ago when the ordinary dose of Glaub. Salts ℥j. given on the third day of the fever rendered P. easier, but he died in consequence of it by twelve the same night. If P. be strong & the fever beginning a brisk cathart. will often do good. ~~generally~~ sometimes the choice of food & drink will be sufficient to keep the body open.

The last indication to be removed by the Antiphlogistic Regimen is that arising from the general acrimony of the humors. This general acrimony of humors partly hypothetical. Dilution is the means of obviating it, by the drinks applied to remove thirst. This completes the Antiphlogistic Regimen.

A second set of means for moderating the action of the heart & arteries is by certain sedative powers applied to the body. The chief of these is cold. Sometimes the most vigorous application of cold has done great service as in the Traitement Glacial pour la peste.

In almost all cases of Ly. a considerable degree of cold should be applied. The windows should be kept open night & day even in the coldest weather. The hands & face should be frequently washed with cold water. In most cases the whole body should be washed once or twice a day. If a salutary general sweat should break out we ought not to check it by strong application of cold. But neither should heat be employed to keep it up. a salutary sweat will go on well enough when the P. is cool. Cases may occur in which the strong application of cold may do harm. as when there is a catarrhal affection, or angina, or Pneumonic affection. cold in fever has given catarrhal affection. This however is very rare; & should be risked to produce the moderation of the Sympt. w.h cold gives. We may remark the sedat. effects of cold by observing the

pulse gradually coming down & the volume of the circulation moderated as we continue the application of cold. Pulse has been brought lower than its usual standard while fever continued, by the application of cold. — Sometimes remarkably good effect has been produced by applying cold in the way of affusion of cold water so as to bring Patients to a state of syncope. This has hardly ever been practised here, nor does it seem to be necessary. Even the general washing with cold water will not be necessary in Typhus mitior — especially in Winter. The keeping windows open, & with little bed clothes on P. will generally be sufficient. But in Typh. Gravior washing necessary, especially in summer. If there be scrophulous tendency we must beware of inducing any catarrhal affection lest, combined w. the fever it should lead to Phth.

A second set of sedatives is the exhibition of Refrigerants, Acids, either vegetable, or the Mineral.

The former preferable, because it is more agreeable & may be taken in greater quantity. Perhaps the chief benefit from acids arises from their correcting the tendency to putrefaction in the fluids. Other refrigerants may be employed — Crystals of Tartar dissolved in water. This cannot be made too strong as the water will not dissolve more of it than is necessary. Neutral salts combined wth alk. taken in the state of effervescence. Nitre is the most powerful refrigerant known. But in too great quantity dangerous. gr 10 as much as stom. can bear — & not more than ʒij in the 24 hours. Syrup of Lemon may be added to hide taste — & it should be given in a good deal of liquid. Volat. Alk. has been given. But vegetable acid not neutralized is the safest & best refrigerant, & may well supersede the use of any other.

When there is danger from the violent action of the heart & arteries, together with irregular distribution of the blood indicated by great heat, frequent hard pulse, flushing of the face fixed pains, headache &c we cannot trust

to the antiphlog. reg. & must have recourse to other methods of diminishing the tension tone & activity of the sanguiferous system. Tone is the tendency of muscular fibre to contract. Tension is the distension of the fibres beyond their natural degree. In the living body there is more than the mere elasticity of the fibres. There is also a living contractile power. Blood certainly stimulates the vascular syst. & blood letting is the most powerful remedy for diminishing the tone tension & activity of the vascular system. But in the continued fevers of this country blood letting is very seldom necessary. Perhaps not one case in 30 where this remedy is required. It was formerly the practice in this country to bleed pretty freely in fever. Dr G. employed it a good deal. Dr G tried it for a year or two but with bad success & therefore gave it up except in a few cases in which the strong Phlog. diath. rendered it indispensable.

Altho at the beginning the Phlog. Death. pretty strong yet bleeding generally does harm. It causes greater debility than would otherwise occur in the later stages of the disease, & here the great danger arises from debility. It makes the recovery more slow, & the danger of relapse greater. If symp. do topical infl. topical bleeding by cupping or by leeches much safer than general blood letting.

B. enumerates 9 circumstances on which the propriety of this remedy must be judged of. The prevailing epidem. if the Ph. Death. continues, or is succeeded by great debility. The remote cause — if from cold, intemperance, or circumstances connected with Ph. Death. & Plethora. The season & climate — the degree of Death. Phlog. The Period of the disease — at an advanced period of the disease bleeding hardly ever safe. after the 4 or 5 day. The age vigor habits, if exposed to cold, intemperance &c & plethoric state of P. Young & full P. bear bleeding best. those of an

active life better than those of a sedentary. The P's former diseases & habits of blood letting. Some people & some nations more used to bleed for slight affections than others. The appearance of the blood drawn out. If it coagulates slowly & a portion of the coagulable lymph coagulates on the top unmixed with the red globules. This will continue sometimes after P. very weak & the blood very thin, as in later stage of Pneum. If blood coagulates firmly, & with a hollow in the middle of the cup. On the other hand if the blood does not shew buffy coat. if it coagulates loosely or will hardly adhere at all, this shews bleeding to be very improper. The effects of blood letting. if the pulse rises Bleeding was proper. but if the lymph. change to state of debility it was improper. In attending to these circumstances bleeding if thought necessary, should be moderate at first 6 or 8 ounces. if it relieve the lymp. &

& afterwards the pulse symp. recurs another bleeding may be employed.

Of purging as a means of answering this indication enough has already been said.

Taking off the spasm of extreme vessels rather hypothet. Diluents recommended in former article – moderate dilution of great consequence by diluting & bleeding the acrimony of the sores. But excessive dilution such the Decta aqua would in many cases be hurtful. There can be no harm in allowing a little nourishment along with diluents. If P. wishes for great quant. of fluids it should not be refused. But many P. could not without great injury take so much as is recommended in the decta aqua. Neut. salts as diaphoretic often fail – tho they may bring out moisture on the skin they will not relieve the symp. & all premature sweating is hurtful. Neut. salts of green should be only as refrigerant, & not so as to bring out sweat. Strong sudorifics, as pulvis Ipecac. comp. not to be used at all in cont. fev. Even

volat. alk. & neut. salts, hardly ever used here. Both are rough medicines & attended with danger. The practice of exciting sweat in fev. has formerly been explained. Therefore perhaps our Dr's observations on Emetics. The use of them is not because they determine to the surface & take off spasm, but because they relieve the oppression of the stom. & by the shake they give to the syst. often cut short fever; or render it more mild when they do not remove it. Dr Y. has seen perhaps 200 instances of fever which went off completely in consequence of emet. early admin. Perhaps a proportion of these might belong to that class of Ephemerides which go off without any remedy. But still many of them must have been of that kind that would have run the ordinary course unless they had been there cut short. Emetics moderately are therefore always to be employed in the beginning of fever. One will often be enough. & perhaps more than two will

always do harm by inducing debility. Emet. in long continued nauseating doses is certainly a very rough practice, & seems to be altogether founded on hypothesis – no good is to be expected from this treatment; & it is certainly extremely painful. The vomitation of long continued nausea must certainly be hurtful – It would be very hurtful even in health much more in fever, Dr. G. tried it two or three years but with very bad success; & consequently gave it up entirely. Antimon. Emet. in the beginning of fever generally administered especially with a view to cut short the disease. But if P. weak, or the disease advanced these are not safe. Tart. Em. The safest form of Ant. Em. 1 gr. in ℥j water of ℔j, a table spoonful or ½ gr. Tart. Em. every half hour. If we wish to produce purging we must give it at longer intervals at 2 or 3 hours. Two or three half gram doses will generally produce vomit. The Calx. Ant. Nitr. is both rougher & more precarious in its operation

from 3 to 5 gr is the ordinary doze. But some times 10 gr have been given with little effect. The stom. is sometimes in such a condition as to be with difficulty affected by medicine. Antim. calcar. Phosph. of the Edin. Pharma. & Pulvis antim. of the London are the same with James's Powder. According to the directions of the Patentee the Paper containing 22 g. was to be devided into 2 or 3 dozes. That is from 7 to 11 g. the doze. & given at considerable distances of time as 5 or 6 hours. 5 g. will be a sufficient doze. & at somewhat shorter intervals as 2 to 5 hours. The dry preparations of Ant. said to be better calculated to produce sweat than vomit. But from the uncertainty of their operation the Tart. Em. is preferable. Ant. medicines often succeed very well & for a great number of cases. But we should remember that instances now & then occur in which they have very violent effects.

Antispasmodics — This class of remedies is on the whole little to be trusted. Proper evacuations

will generally have a better effect than any remedy of this class. Of Ant. Op. is the best, but not much to be trusted as general remedy in cont. fev. In some cases it will be safe & useful in others the contrary. Many P. have been worse after it than before, headach, delir. disord. of Hom. have been increased or induced by it. – When there is great irritation, constant watchfulness, hiccup, vomit, diarrh. we may make trial of Op. to relieve these peculiar Symp. in such circumstances 9 cases of 10 will be benefited by it. But the gloomy Op. early & indiscriminately, so as to supersede other remedies has always been hurtful. Op. properly given to check vomit. dia. procure sleep, relieve irritation of nervous syst. that produces tremor & subsultus. Op. considered also in its cordial effect with wine, & when former Symp. accompany w. great debility may do good; but not mean so good a cordial as wine. In cases attended w. inflam. Death. Op. not so much from its stim. effect. (see 220 #)

Blistering. This was formerly much in vogue, but is now very much discarded. They have been usefully, perhaps, applied to the head when there was great oppression of head, delir. & coma. But in general no bad effects will follow from neglecting them in such cases. They have been employed for raising the pulse & supporting the vis vita. They may raise the pulse, but even in debility unattended w/ fever no man would have recourse to blistering for supporting the vis vita when so many better methods could be employed. If the circulation is languid on the extremities blisters have been employed at them but sinapisms better from their speedy action generally. For relieving topical inflam. head ache &c they often do good — but for making a discharge of the morbific matter, or for removing lentor of blood, they can have no effect — as the causes merely hypothetical.

As a stimulant may act on place to which they are applied, & thus from antispasmodic. But very improbable that they have any general antisp. effect. In many cases tubercles, & tremor have come on after the blister applied. It is said by some that blister has relieved these symp. but this not agreeable to general observation. Blisters also apt in bad fever to suppurate or run to gang.

Opiates administered for relieving cough in some febrile diseases as Pneum. have done great harm. So also in infl. diseases of bowels. In both cases they may palliate symp. but in the end they also aggravate them. In some Pyrex. with great debility as Measles Small P. great benefit has been derived from Op. – Other antisp. articles of little moment, Musk may relieve some of bad symp. in advanced state of disease. It does often relieve Asthma, & that speedily. Camphor 2 to 5 g may act by its strong sensible qualities on nervous syst. rather than on account of the quant. taken – Volatile Ether

has been sometimes given with advant. for debility
stom. in nausea. vomit. hiccup - in great debility
may have similar cordial effect with Op. -
Warm Bathing or fomentations now very ge-
nerally discard. In cases of infl. they will
relax the parts, & consequently may do good -
may relieve headache. Thus it will do without
fear when headache present. But in few.
not much is gained by them. Synch. go
on as before - & generally the application
of warmth after the cold fit is gone off &
the hot stage formed, does harm. The sweat
thus induced will seldom do good - it rather
aggravates the Synch. unless it entirely remove
them, which last effect seldom happens.

To remove the cause or obviate the effects
of Debility.

Often we cannot remove the cause of debility -
as the febrile contagion wh. is the great cause
of it. But we may do something towards it.

The P.'s body is continually emitting febrile effluvia. Therefore of the utmost consequence to remove the P. as much as possible from the effect of this accumulating, & being applied to body. Remove poor P from their own houses to hospital often has more effect than all the remedies. removing P. from one chamber to another. taking away from the chamber every thing that might be forme to contagion - removing him from closet, alcove beds, or even corner of room to middle of it, or putting his bed before window or between two open windows - having no curtains to the bed so that a stream of cold air may constantly blow over him.

For obviating effects of Debility. Wine the best application. or when this cannot be had gooey cyder, ale beer, spirits & water. fine spirit hardly ever proper. Even wine does best when diluted with about an equal or 2ce quantity of water.

We began with a small quantity of Wine, as one or two table spoonfull a day - & it agreed wd. P. we encreased it to 8 or 10 oz pr day then to 1 lb or even 2 lb More than this will not often be necessary. But of particular kind. Belor, hence it will often be necessary to increase the quant. according to the Symp. to two bottles a day or even more. P. caught f. after Lumbago, for wd. had been bled. This f. shewed most alarming Symp. of debility. pulse was very much sunk, there was drowsiness of the eye, & rattling in the throat. Great thirst. for wd. P. would take large draughts of cold water tho it evidently rendered him weaker. Wine strengthened the pulse, relieved the drowsiness of the eye for an hour or two - then it would return. thus P. took generally two bottles of wine a day. One day he had two bottles Port Wine of Madeira - he recovered - He must

be regulated in our exhibition of wine by the circumstances of the Pt. taking it, & of its agreeing with them. Some Pt. take loathing at it. This most destructive circumstance, but we must endeavor to supply the want of it by other fermented liquor, or French. When no fermented liquor will remain on the stomach we may try some of the grateful aromatics, but these are not nearly so good as wine — besides their cordial effect they are also system. they heat the body & quicken the pulse. Wine instead of quickening the pulse in fev. often brings it down — cools the body relieves headache & deliv. Porter evacuations should be better for removing del. than wine, but these cannot be employed — & wine is found in many cases even of furious delirium to have a remarkable effect in relieving the symptom. especially in del. with weak frequent pulse. This shews that Del. may exist when no inflam. state present. This in last stages of dropsy. In such cases del. must be from violent disorder of nerv. system.

P. a soldier, had high del. of the violent kind, with some appearance of insp. death. Dr G. was at a loss whether to employ evacuations to obviate insp. death. or cordials to support vis vitæ. He preferred the last & wine abated the del. & the P. recovered. Had evacuations been employed probably so great debility might have been induced that P. would have sunk under it.

On the use of Bark in cont. fev. see Dr Clarke of Newcastle. Dr G. has tried it but with little success even when the fev. had considerable remissions. The most effectual mode of giving it is after having admin. Ant. Tart., the evening before to admin. B. next day when stom. settled, in doses of ʒij or ʒj. Even in these circumstances its effects of no great consequence. Dr G. has seen no inst. of its giving irregular determin. or topical congestion of blood.

Of Men. Tonics as Sacch. Saturni & preparations of copper or iron, hardly any use is made in this country. Sacch. Sat. too dangerous. Cuprum ammon. Pills useful in Epilepsy from which said to have tonic power. But Dr Fothergill's notion of tonics probably true that

they act by blunting the appetite, & thus preventing plethora. Arsenic cures remitt. of w.c. as well as Jubrom. but its effects on continued fev. not much known. Iron safest men. tonic. Metals effects on con. fev. have not often been tried.

3 Indication – to obviate tendency to Putrefaction. This has been explained formerly, & is to be answered by the remedies already recommended. Putridity may take place in a high degree in the primæ viæ. This to be evacuated by emet. cath. or glysters. The general tendency to be corrected by acids & accescents, vegetable as well as vegt. acids to be used. Wine & other stim. & tonics have similar effect. When Sanguineous state venæ & B. must be liberally employed.

Of the Typhus Flava.

This disease is treated of, besides the authors mentioned in Cullens Syn. nos. by Lind, Sir John Pringle, Dr Blane, Dr Jackson, Dr Rush, Dr Chisholm & Dr Moseley. The last labors to prove this disease to be Causos of the ancients. Dr Rushes theories may not, in all cases, be right; but his observations must be accurate; & his mode of treatment is successful. In General he agrees wth Chisholm & from them chiefly the following observations are taken.

The Symp. are various in different P. & in different states of the weather. Often there are w^t. Rush calls premonitory Symp. of disorder in various parts of the body before the proper attack of the fever. Costiveness, intermitting disordered state of bowels. dull pain in the right side shewing that the liver was disordered. Anorexia, flatulency & depraved taste shewing the stom. to be disordered; & the last from the Sympathy

between Stom. & mouth. Heat in the Stom. shewing the disease to have begun, & a low kind of infl. to have taken place. Vertigo & headache both the effect either of disorder in Stom. or of incipient fever. Eyes sometimes dull & watery – sometimes bright, sparkling yellowish or ruddish. All marking a preternatural action of vessels of the eye. or infl. state of them. dimness of sight, & according to Chem. sometimes this amounts to total blindness. In very fever the sight is somewhat affected. Hoarseness, sore throat, shewing slight infl. of fauces, trachea or esophagus or Larynx. Sometimes diarrhoea – sometimes unusual vivacity – the former perhaps connected with congestion, the latter with increased action of heart & flow to the head. Sometimes moisture on the hands & a disposition to sweat at night. Sometimes skin dry & suppression of usual sweat at night. These Sym. often continued for some days before the accession of rigor.

What is remarkable in some P. these symp
continued thro the whole course of the
Epid. without inducing the disease.
Such warning were not universal. Sometimes the fever came on suddenly. P.
would go to bed well & awaken in the
rigor. or would be suddenly seized
with strong fit of rigor at his usual
occupation. The degree of rigor generally
indicated the violence of the disease. Slight
fit of rigor was very bad symp. &
vice versa. The countenance now was
changed. it assumed an appearance
not only different from health but
also from that of the common ord.
bilious fever of the country. Eyes were
red, watery. or inflamed, bright, sparkling, with a degree of suffusion. The
face was flushed, or dusky, or discolored.
after 10 Sept. when weather became cold

The determination to the head was universal. There was generally dilatation of the pupils, such as happens when compression of brain prevails. Sighing frequently was universal, there was very tho with little increase of heat. Pulse often weak - sometimes full tense, quick. sometimes remarkably weak & intermittent, & this even in P. who only had previous symp. lent without taking the disease or in those that were convalescent. - Sometimes pulse was remarkably slow - from 64 to 44 even down to low as 30 in a few cases. - So that slowness of pulse by no means in all cases proves the absence of fever. Slowness of pulse was most common in children. - As the weather became cold there was less slowness & intermission of pulse. Next pulse became unequal - what Rush calls hobbling pulse, and has been very

like one another. There was generally a bad symp. In this fev. there were frequent hemor. sometimes epistaxes, or menorrhagia - either too great at usual time or at unusual time. Hemopt. In fev. advanced the hemor. from various parts of body from the corners of the eyes - from old wounds - even from the perforations in the lip of the ear made for hanging earrings at. Dr Rush thinks that there was great congestion in the head. This is probable from the flushed face red eyes, disordered sleep. coldness &c. There may however be congestion in the head & yet no effusion. P. with evident hydrocephalus internus died with strong symptoms of Inflamed brain - On opening head no effusion had taken place - The congestion was merely in the vessels. On this principle we may

understand how these symptoms, sometimes went & came as was occasionally the case - They also understand the extraordinary swelling out of the eyes - perhaps also the coma, delirium, convulsions. — There was generally nausea & vomiting - & sometimes for several days before the fever attack - The disease when it proceeded from the smell of the damaged coffee gave more nausea, than when from ordinary contagion. - There was seven pain & great irritability of the stom. so that every thing taken inwd was rejected. There under degree of inflam. The vomit. generally bilious, yellow, or green sometimes from the very beginning, & sometimes not till 3rd day. If vomit. was checked at the begin. it generally returned about 3 or 4 day. & this was a very bad sym. In some cases the vomit was almost constant, altho some such pt recovered. Great distention of stom. from flatus. Generally costiveness

& to a great degree, tho sometimes decr. from begnn. Sometimes Tenesmus, w. black stools plainly from Ileum. Tension of the Abdom. sometimes black vom. from 1. day. of 4 such P. 3 recovered. Sometimes black vomit. ou wood about 4 or 5 day, this was not always fatal, tho a very bad Sy. This was not always bile mixed w. soda, but a morbid secretion from the liver - analogous to black urine. This discharge became still blacker towards end of disease, & so acrid as to inflame hand of Surgeon who opened the body. Grumous blood sometimes thrown up towards end of disease. Worms were sometimes discharged - this merely accidental.

Fecces were very various. Natural, green, olive, black; fetid acrid so as to excor. rect. In few which are in Journal. Urine also various. Clear, turbid, highcolor

dark. This last continued several days after the crisis. Pain in discharging urine as in gonnor. When no urine it was very bad. In some cases several quarts limpid urine discharged just before death.

Sweats then from beginning. This sometimes followed clear. Sometimes yellow & fetid, or cold with full pulse. But generally skin dry from first to last.

Sometimes discharge of mucus from fauces. This was favorable. When the tongue was first moist white. Then red & smooth. Then black streak on it, was very bad. Nerv. sys. violently affected from begin. Species of apop. would come early, especially in those accustomed to hard drinks. Sometimes syncope at begin. or convulsions chiefly in W. Indies. Coma, sometimes, or obstin. watchf. This last was often found in convalescents. Sometimes

There was numbness & immobility of limbs from the begin. Or violent cramp of arms or legs that is sense of convul. Often pain in calves of legs. Sometimes there was great deficiency of limb. throughout, & sometimes the reverse. Tremor & subsult. were rare, & chiefly in convalescent. Generally great weakness of muscles, tho sometimes great muc. strength, even just before death. Delir. common — sometimes it was recent. or recent & cons. Some cases Mania without del. fever being suspended while M. continued. The Sensor. was gener. much changed. & the memory of some days was gener. lost, tho no deler. present.

Pains of various kinds & degrees. tho. sometimes no pain, as when P. sunk suddenly then as debility went off pain of head —

pain of Eye balls - shooting pain from ear to ear
pain in side, liver, stom. bowels burning or
spasmod. pain so as to make pt. cry out
dreadfully - Pain in back of head, in neck
in the back - shooting from the back down
the thighs, legs &c. In such cases the
pain was the chief misery the P. suffered.

Deafness sometimes occurred - dimness
of sight - even complete amaurosis - in some
cases the subst. of Eye was destroyed.

Somt. no thirst, & somt. most intense
thirst when it appeared in advanced stage
Appet. was universally impaired, but in
convalescents returned earlier than usual.
P. generally did not like wine - but liked
coffee & malt liquor. The natural appe.
between sexes strong in convalescents.
Many marriages in time of convalescence
of Epid.

Sometimes Lymph. & cervic. glands affected

But this was not common. & such cases all recovered.

This disease certainly prevailed in the W. Ind. before it appeared in Phila. It was brought from W. Ind. to Phil. in the ship which carried the damaged coffee from St. Thomas thither it proceeded. May from Phila. it was again reexported into W. Ind. & shewed same symptoms. To the W. Ind. it came from Sierra Leone. April 93 it was imported to W. Indies in a slave ship, which was long detained on coast, & being crowded this fever broke out & destroyed most of the crew & passengers. In Septr. 93 it was imported to Phila. In St. Vincents few women & no blacks took it. All that were bled in St. Vincents died.

In the course of the disease the skin was sometimes warm, but often colder than usual.

particularly in limbs – this was often very distressing & shewed the worst species of the disease. – The yellow color of the skin was not universal. It seldom appeared if full purging had been employed. Seldom before the 3 5 or 7 day, & the earlier the worse. The y. color was at first partial. on neck & breast. Nor was it constant but went & came with the exacerbations of the fever. It often remained for some weeks after the fever was gone. Perhaps in all fev. there is a slight degree of y. color – tho often hardly perceptl. Sometimes there was a clay color in the advanced stage of the disease, & this was always fatal. – Sometimes cutaneous eruptions took place – It is certain that the scarlatina prevailed in Philad. before the y. f. And from the red color wh. sometimes appeared it is possible the two diseases might be in such cases combined. Sometimes a scaly eruption about mouth – this favorable. Petechiæ common about last stage & always

fatal. At first they were red, & grew black as the disease advanced. Carbuncles on the limbs were common - in one case carbunc. remained after disease gone. - Blisters were not apt to run to g. In some cases Blist. would not affect the skin. The Pulse was not putrid, but resembled smell of S. Pox.

The disease had a considerable resemblance to Intermit. & generally of the tertian period. P. sometimes could walk about on the intermediate days. In one case Ag. T. turned into regular Quartan. - The terminations happened only on the odd days. At the beginning of Epid. disease often terminated fatally on the third day. In the W. Ind. death has occurred within 24 hours from the invasion. In Philad. at the beginning of Epid. the disease yielded more easily to remedies when the invasion was most violent. Afterwards it was in some cases protracted to 30 days. - Few other disorders

prevailed during continuance of Epid. great Epid.
said to swallow up & assimilate all other diseases.
All ~~ages~~ ages were subject to Y. F. But especially
the young. The old were less violently affected than
the young, women than men — the disease
never spread much. It was often carried out
of Ireland. but never spread generally in the
country. — People much exposed to putrid
effluvia suffered least. Of 100 butchers 3 only
took disease. Painters, same. Of 40 scavengers
only 1 affected. Grave diggers, & people employed
in digging cellars &c little subject to it. Hence
it has been thought that fresh earth attracts
& destroys poisonous effluvia. Dogs when bit
by poisonous serpents said to thrust their
noses into ground from this cause. After
the disease had prevailed a few weeks the
whole atmosphere ~~seemed~~ was so much tainted
as to produce general want of health, even
in those who did not take the disease.

The Mod. of treatment in common cont. Fev.
did not answer. All who were treated in this
manner died. The mode most directly opposite
was found most successful. Bleeding was
the most important remedy. At first about ℔x
then, when this succeeded 5 & 10 such bleedings
might be necessary. So that blood was often
drawn to the extent of from 70, to 110 ℔s.
In many P. these relieved the S. again &
again on their fresh recurrence. Often the
blood did not at first shew buffy coat.
But would exhibit it on the 2 or 3
bleeding. B. Coat not so common
while very hot weather lasted. There
must have been great Phlog. Diath.
& the chief danger were from infl. of
Brain or Bowels. The infl. Sym. most
violent after 10 Sept. when weather
became cold. — In W. Ind. bleeding
did not succeed. In Grenada bleeding

was very hurtful. The blood gave B. C. yet died at first relieved Sy. but afterwards the recurred with greater violence, & were almost always fatal. The same occurred in St Vincents, even in Vigorous plethoric P. – yet Mostly found bleeding useful. Purgery, even by very strong purges was found very useful. by calom. Jalap & Gamboge. Calom grx. Jalap grx was often given as doze, & repeated to make stools – four such dozes have been administered in 24 hours. Gave smart clear. & thus very much relieved Sy. even when bowels previously open. If there were not 2 or 3 loose stools a day the Cathart. was repeated, with the addition often of Gamboge w.h. is a most acrid drastic purge. Some P. took 40 gr. Cal. in a day. Thus sometimes salivated, & that always relieved Sy. Chisholm also found Mer. very useful. He gave to one P. gr 400 Cal. in 20 or 21 day. &

P. recovered.

Phlegmasia.

This class comprehends all idiopathic inflam. whether external or intern. The fever attending them is most commonly Synocha. But infl. may exist in body wth febris Typhoides. - There may also be infl. without fever. In Cynanche Tonsil. the fever is Synoch. But in Cyn. Malig. it is Typoid. & of very great debility. If it be the same in infl. of Stom. bowels there is often connected with these infl. great debility & strong marks of Typh. In Pneumon. also the fev. may be typh. An Epidem. pleur. has prevailed of this kind w^h did not admit bleeding (Huxham) The same may happen in Phlog. tho generally all the Phlegm. have febris Synocha. Thus in Sm. Pox, in Measles & in Catarrh Epid.

The fever sometimes precedes the infl. sometimes it comes after it, & sometimes they come on together.

External infl. may easily be known by the swelling, pain, heat, redness &c but in cannot

244. Thus judge of internal infl. Pain alone does not characterize it, tho pain generally accompanies internal infl. But the truest criterion of infl. is the lesion of the function of the part affected together wth. pain & febrile sympt. The pain of infl. remains fixed. This sym. deserves to be particularly attended to, as the remedies in ordinary cases of pain of any internal part would generally be very improper in infl. In infl. of stom. there is not only the fixed pain but also nausea vomit. & other sympt. of disordered function. In Pneumon. pain with cough & difficulty of breathing. In infl. of bowels pain with costiveness &c. in infl. of throat, pain wth. difficulty of swal. & so in all other cases. If therefore there be pain fixed, lesion of function, & sympt. of Synocha we may conclude that there is infl. — It is not always easy however to determine this point wth. certainty. As there may be cases in wch. from the sympt. of pain connected wth. great irritability

we might suppose infl. when none. & there may also be infl. id. opposite state of system, when we might not suppose it present.

Another mark of infl. is the blood giving the buffy coat. But this is the effect rather than the cause of inf. & consequent. in incipient infl. the buffy coat may not appear, even in strong infl. diseases, as in Pneum. Nine cases out ten of infl. the buffy coat will be present. But the mode of bleeding may affect its appearance. It depends on the slowness of the coagulation. In ordinary health blood will coag. in 5 or 6 min. in infl. may take from 20 to 25 min. Along with B.C. the coagulum is also extremely firm. The shape of vessel affects the coag. of blood & consequ. may prevent or cause B.C.

The various Phleg. differ chiefly with regard to their seat. The there may also be specific differences. — To observe progress & effect of infl. might that the nature of disease is same in all, namely a peculiarly morbid action of the

repels of the part. In all infl. there is increased action of the arteries - in many cases we can feel this - in some we can see it, as in infl. of Eye. This principle being admitted there will arise many various modifications. The whole of these are not perhaps well understood, or distinguished. But attempts have been made to divide them into four heads (See Lond. Med. Journ. Vol. 2. Hunters Post. Works - Works of Dr Carmichael Smith)

1 The cause exciting Inflam.
2. The function of the part affected
3 The structure of the part affected
4 The texture of part, not natural, but consequent on the previous disease.

1 The remote or the occasional cause may be different, & hence a great diff in the nat. & progr. of disease. As in Ophth. all infl. of Eye give pain & impedes function, but then on many different species of it from the nature of the cause. When it comes from cold, motes, wounds, too great light & the infl. nearly, or altogether the same. But the

in all these cases specifically different from that which proceeds from scrofula. In this last case the disease begins on eye lids & spreads. The appearance of the infl. is such that an experienced Physn. can distinguish the Oph. Torpe at first sight. Its progress is also different from gonorr. It is extremely difficult of cure, & apt to recur. The Oph. Lymphatica, (swedicum) from suppress. of vir. ulent gonorr. differs from both — much more vol. than either, & the cure different. Mercury — One P. in Rd. hospt. lost both eyes from it in course of few days.

The infl. of throat also differs according to its causes. That from contagion Cyn. malig. forms small superficial ulcers, covered w. sloughs, & tends very much to Gang. Cyn. Tonsil. from cold runs speedily to sup. & hardly ever to Gang. — Measles, S. Pox. Typhus may also produce infl. of throat. by producing ~~ophtha.~~ Sometimes infl. of throat gives deep pungent pain, sometimes superficial pain & difficulty of swallowing. In first case Tonsils much enlarged & red, in the

core not much enlarged & sloughy, the both from same cause. Infl. of throat from Lues different in symp. & cure from them all.

Infl. of capsular ligament also different according to its cause. Gout specific. different from Rheum. first alternates often w. internal parts, the other does not. neither cure either to sup. or g. the one produces chalk stone, the other a gelatinous effusion.

Infl. of joint from scroph. or white swellings is different from all. So is that from Lues. Conglobate glands may be affected by scroph. by Lues, in girls at time of menstruation or in cancer, or in very bad fever as Plague. All these bubaes differ in progress & termin. the Plague bubae will suppur. in 5 or 6 days — Lues or cancer, will take as many weeks scroph. may take as many months or even years, & not sup. at last.

2. Structure & functions of part affected.

All parts of body even bones, in necrosis

& the teeth subject to Infl. Many circumstances in the disorder depend on the texture & function of the part. & many species of infl. from this circumstance. Sometimes a Membrane may be infl. & sometimes Muscular subst. – In the Skin different parts may be subject of different infl. Erythema may affect the external cuticle & spread, without tendency to sup. or the infl. may go deeper & produce suppuration – The infl. may also spread along the surface tho the seat of it be much deeper.

1. Infl. of Skin is Erysipelas or Erythema,
2. — of Cellular texture Phlegmon or inflamed testicle mammæ, glands &
3. — of Skin form transparent membrane, which is the seat of all the Fluxes.

All the Infl. in this of the same species, require same remedies, have same progress & termin, & require only slight varieties in the mode of treatment according to the part affected. They resemble the Erythema in their tendency to spread, & generally also to Gang.

4. — Infl. of soft mucous membrane of nose, &c.

Urethra in Gonor. requires a different treatment from that of form membrane in Lungs. The progress is also different. The formation of pus which takes considerable time in form membrane, & in skin or cellular tissue is very rapid in the Mucous Mem^b. In Urethra the insertion of Bougie may give pus in few hours. But the infl. of mucous membrane in catarrh (the membrana Schneideriana) may spread to Lungs & give Pneumon.

5. Infl. of Muscular fibre is of a peculiar species as what occurs in Rheum. or Gout. Both the tendons & the aponeuroses may be affected w. this infl. as well as the musc. fibre. — Rheum. generally from cold. It has different course from other infl. even of Muscular subst. In Wounds causing infl. of musc. subst. suppur. takes place, & a wasting of subst ensues. G. also may ensue. But in infl. of Rheum. no tendency to sup. to wasting, or to G. Effusion often takes place so as to produce swelling & even fluctuation, but sup. never ensues.

Phlogosis, comprehends both Phlegmon & Erisipelas. Phleg. may occur with no Pyrex. but in large Phleg. there is always great Pyrex. The cause of these infl. not known. — Viscid lentor in the blood will by no means account for infl. of particular part. — The slow coag. altho it was allowed to be a proof of such lentor existing, is the effect, not the cause of infl. — Error loci, supposes a descending series of vessels from the largest to those w^h. will only admit particles of the thinnest parts of the circulating fluids — and when larger particles forced into small vessels an obstruction spasm & infl. succeeds. It is certainly true that in Infl. there are more red globules there usual in the vessels of the inflamed part. But this also is the effect, not the cause of the infl.

Cullen supposed that in infl. an entire serum passed thro the exhalents. There is an increased exhalation in infl. More than usual of gluten, & saline matter pass thro,

& then changed by remora, perhaps also by some species of ferment. pass into the form of pus. Pus is discharged in clear jelly like form. In short time, perhaps 15 min. after it is discharged it begins to assume a whitish appearance. In a few hours it is pure pus. – Increased exhalation in infl. is illustrated by the Phenom. of Pneumon. Often there is increased action, flow, & plethora in some vessels without infl. as in Apoplex. Infl. Hemorh. & mucus or dropsical discharge are all related, & mutually illustrate each other.

Phlegmon & Erysipelas are easily distinguished. The first exhibits vivid red, does not spread, & rises to a point. The second gives dark red, spreads rapidly, does not rise to point. will suppurate without rising to point. Boundaries of Phlegmon round, those of Erysipelas irregular. The touch removes

the redness, & leaves for a little a whitish or yellowish color. Erythema gives no throbbing pain, but rather burning pain. Phleg. may however pass the suppuration stage & run to g. —

In infl. of Lungs there is first expectd a glutinous matter — then it becomes purulent, according to usual course of glutinous discharge in Inf. Then pure blood may be expectd & discharged.

In many cases there is tendency to Infl. when no inf. takes place. Thus in bleich in Menorrhea. Even in the dropsical state there is a tendency to the infl. state of the vessels. But has been found in anasarcous P.'s limbs.

Infl. of Lungs tends to state of vessels in gives Hydrothorax — May, from peritoneum be water effused into abdom. cd, well afterwards pass into pus. In one case in the lake then pus was discharged —

Obstruction one cause of infl. But there may be great & permanent obstr. & yet no infl. supervene. Scirrhus liver may continue for years, & at last prove fatal, without producing infl. Same may be said of Mamma, testicle, lymph. & conglobate glands, kidney. One kidney has been found obstructed & enlarged to weight of 2 lb & yet no infl. Same can be said of ament. with alement. canal. May be scirrhosity of pylorus w. may last for years & no infl.

The chief part of the proximate cause of inf. seems to be a violent & morbid action of the arteries. Hence the pain, throbbing, heat, redness & peculiar secretion. The secretion found in all inf. even the most sluggish. It is connected with injuries of every kind, mechan. chem. heat cold &c, all of these producing infl. — But the increased action of the arter. does not always produce infl. as in cholera, Diabetes, Milk — all indicating peculiar action of art. tho no infl.

often also there is infl. when no stim. applied to the vessels of the part. as in Angina, Pneum. Rheum. Gout. &c. Then infl. we know of no acid matter applied to the part. seat of disease only a general cause to the system. — Hence it is plain that a general cause applied to the body produces top. infl. — The cause of infl. may then be said to be an increased & peculiarly modified action of vessels part, either from general or particular cause, & a degree of spasmod. constric. of extreme vessels. This theory is imperfect. Sudden infl. of Eye on little dust, or snuff or applied to it, & the equally sudden removal of infl. on the voluntary matter being withdrawn, is not consistent w. the doctrine of spasmod. stricture. — There is also spasm with no infl. as in fever, thirst &c & as was mentioned there is also peculiarly mod. action of vessels when no infl.

Spasmod. state easily propagated to all the extreme vessels. Hence general fever in top. infl. & often top. infl. can only be relieved by moderat. gen. fever.

Remote causes of Inft.

The application of numberless stimuli of all kinds may induce inft. A smooth body or a given bullet may lodge in body for years without inft. It may make a bed for itself among muscles, & be envelopped in a thick membranous coat, & give no uneasiness. But this is not to be expected. Generally all extraneous matters forced into the body prod. Inft. Wounds sometimes heal without inft. or as it is called by first intention – this also rare. Great heat as in burn, gives erythematous inft. So great cold as in chilblains. Increased impet. of blood to head in few. gives occasion to inft. of brain or its membranes. Perhaps to this cause we must attribute the pimples in at a certain period of youth give pimples in those whose face is clean the rest of their lives. – Great congestion in veins and give inft. child from lyaken too light

about the arm had Erythemat. swelling. w^h quickly
run to G. & P. died. Yet often no cause
can be assigned for infl. as pimples, boils
we even meet with habitual disposition to
Phlegmons, and to Erythema. –

There is a tendency in all infl. to adhesion –
the infl. part has the minute vessels relaxed, &
these come to anastomose with others to w^h they
are applied. On this principle Taliacotius
formed his artificial noses from the thick
part of the arm. – Same practised in India,
& now made from skin of forehead. – Hence
the adhesions common in the interior surfaces
of the body

All parts of body not equally prone to
suppur. infl.
~~infl.~~ Skin & cellular membrane most subject
to it. Small thorn in point of finger prod.
infl. & suppur. – but in deeper parts infl.
not so easily produced. bullet in body may
change its place & yet no infl. ensue.
But if cloth carried in w^d. bullet, may continue

infl. for great length of time, & when that thrown out wound will heal. Cold so slight as to escape notice may produce infl. of intern. parts. Phlegmons cannot be referred to this cause, but Erithema often may.

Termin. of Infl.

Infl. may terminate by resolution. That is the action of the vessels may cease spontaneously. & this ceasing of action of vess. may be connected with discharges from different parts of the body, as Hemorrh. sweat &c — Or the infl. may change its seat, as when Cynanche Parotidea alternates with swelled testicle — The Infl. may leave test. & head may be affected with Phrenitis, so that P. may die in few hours. — The resolution of infl. may be connected with or produced by exhalation into some other part, as cellular texture, & this exhalation may be gradually reabsorbed. Thus Rheum. swellings may be resolved & lyced. The pain in these infl. is greatest before the swelling takes place — the swelling implies

effusion or exhalation. The effused matter may be absorbed after it has been great, & gone into the state of pus. — The exudation of vitiated matter from infl. parts, especially from inflamed membrane, becomes opaque, thick, form, like cellular substance. Ramifications of the inflamed vessels have been pushed into it. & they have been extracted from trachea after death. — This process may be very quick within 24 hours.

Second Termin. of Infl. is Suppuration.

When exhaled matter very thin it may be absorbed, & often is. But when it is thicker & more glutinous the absorption is not so easy. In serous infl. absorp. goes on very ill. so also in inflamed membrane. This circumst. gives occasion to the formation of pus. The gluten effused becomes white & opaque. The thin part being absorbed. & the remaining part undergoes some changes, becomes white soft & equal. w.t little taste or smell. It has

granulation under it. Gum bore pus has no taste
sup. of Lonel always felt. Pus has no peculiar
tendency to putrefaction - may be evaporated to dryness
without coagulation. Greater part of it is water. The
remainder contains some oil, & saline matter.
It sinks in water - does not my it. cold water, but
does it. hot. - In indolent ulcers pus has flaky
as well as globular parts. - Diseased body gene-
rally gives very bad pus. To give good pus both
the constitution & the part must be sound. Near
centre of body pus best. On extremities not so
good as on foot. even position of the part
will affect the formation of pus. Slight
changes in the state of health will alter the
condition of pus, or even prevent its formation.
cause only coagulable lymph to be effused.
This observed in ague, cold fit stops discharge.
State of weather also affects suppur. Mild dry
weather cause good pus - cold wet weather
cause ulcers to be covered with coagulable lymph
instead of pus.

Matter secreted from surface of wound is not pus, but soon becomes so. Vessels, particularly minute vessels of inflamed part grow larger, & the increase more perceptible in the veins than in the arteries. New vessels are formed & that very speedily. P. died of Hernia in 24 hours, & new vessels were found in the incarcerated parts.

Time of formation of pus various. In muscular wounds pus formed in a day. Blebs on skin in 20 hours. In some parts sup. slow, in others quick, according to distance from heart or Vessels it is impossible to say when it is too late to attempt discussing an ulcer – Pus does not irritate parts forming it, but dissolves amorph. substance. No natural discharge irritates parts producing it – Tears excoriate cheek, tho not the lachrym. duct or eye lids. – Tonsils may sup. in 36 hours, or may from 8 to 12 days – even after this may be discussed without suppuration –

262. Good pus is one of the best vulneraries, and therefore should not be removed from the wound. Great sup. always produces loss of substance, hence the scars that on left.

Pus is readily reabsorbed, & often without any bad effects, sometimes very bad effects have arisen, but uncertain whether these from the absorp. of pus perhaps ~~happen~~ ~~from~~ the oxidation of the previous inpl. or in formation of pus, might be the cause of the Hectic that supervenes. It has been supposed that hectic arises from absorption of pus. It is certainly connected with great & tedious suppurs. The opening of Emphysema has removed hectic. The cutting off an ulcerous limb has stopped hectic. But in all these cases, Hectic may have been from the formation of the pus & not from its absorption. Pus of all kinds may be reabsorbed, even from venereal bubae. from Parotid swelling

supervening on Cyn. Malig. Erroneous to suppose pus formed from solution of fat, or flesh. It is most likely nothing but the serum. (Parts producing pus come nearer than ordinary to state of glands, that is they become unusually vascular: & in most vascular parts pus most readily formed.) wasting of flesh w. accompanies purulent sores the effect not the cause of the pus. — Has been said that pus formed in Lungs has been taken up & deposited in other parts. Many accounts of this kind have been, at least, much exaggerated.

Symptoms of the formation of pus are previous infl. especially erot. infl. continued beyond term at wh. resolution usually takes place, without any signs of resolution. Remission of the pain. or change in the kind of pain. The pain of supp. not a

not a sense of distention like that of Infl. but a throbbing pain, Dolor pulsantium, & a ceasing of the pain of distention. – The pulse wd. in infl. stage was hard quick & becomes softer & fuller. Rigor & cold shivering connected with the formation of pus. On insp. of Tonsil. Dr G. felt rigor as first warmth of the suppur. & in 36 hours the imposthume broke. It may be formed in shorter time on skin & gradually wasting away the parts till it find itself an opene. Plague bubo most rapid, venes. neph. leroph. most tedious. – When the pus is completely formed the throbbing pain ceases. Sometimes no pain remains, & sometimes only a sense of weight. The tumor becomes soft, & points outward, fluctuation may be felt. Softness & fluct. may also be from effusion, but this must be judged of from the circumstances. The apex is first red, then it turns whitish. The swelling subsides by the absorption of the thinner matter.

suppuration always tends outward. Imposthume in Liver will make its way outwards thro the teguments of the abdomen — impost. in Abdom. has done same thing (V. Swieten) — sometimes however suppur. breaks internally

The third termination of Infl. is Gangrene.

G. the most likely termin. in cases of extreme violence of action of arteries. In G. there is suppuration as in Sup. but there is also a degree of putrefaction change of the matter effused. In Sphacelus, or complete G. not only the matter effused putrefies, but the neighboring solids also.

Phleg. less disposed to G. than Erythema. Certain states of body give great tend. to G. both in Phlegmon & Erythema, or in combination of two, that is Phlegmon with spreading redness, & infl. Gout & Rheum. have no tend. to G. Very slight injuries will prod. G. in constitutions disposed to it. Pressing nail too close has given fatal G. Carbunc. of plague men rapidly to G. —

 Some parts as Skin, Stom. Bowels much more prone to G. than others as muscles, eyes, liver testicles. The Lungs often run to G. In inflm. of bowels, G the ordinary termin. suppur. but rarely occurs. — When G. great it spreads so as to affect the muscles, the Ligaments of the joints &c. In some cases of fever G. has been so great as to carry off the feet.

G. consists of several morbid conditions combined. In the beginning there is effusion of red blood — or rather of a watery liquor mixed w. blood, that is of serum w. some particles of red blood mixed. This is poured into the cellular texture & there putrefies. — Every effusion of this kind is not G. in Scheynosis there is effusion of red blood into cellular texture, as in bruises, tho no G. This common in dropsy tho no G. The previous inflm. is necessary to make effused blood putrefy. The violent action of vessels must destroy their tone. & in worst cases cause the complete death of vessels — difference between recoverable weakness of vessels & sphacelus only in degree.

Tendency to G. depends on general state of body. The proneness of effused liquor to putrefaction does not account for G. because that liquor often effused without any tend. to G. as in Petechiæ, Dropsy &c. Great heat of inflamed part said to contribute to putrefaction of exhaled liquor – This does not seem to be true, heat of inflamed part very little greater than that of the rest of body.

To prevent G. especially in Intestinal infl. indications to weaken the action of the vessels. – Yet in many cases, as in Dropsy, there is great tend. to G. when no violent action of vessels can be supposed. Violent action of vessels & great debility therefore, seem to prod. same effect in giving tendency to G. that is both seem to act by destroying the living principle of the vessels. – Said that G. depends on particular poison as ~~in~~ plague. There are modifications of G. from the nature of the exciting cause. Cyn. Mal. violent infl. tends to G. very rapidly – even when little infl. of throat G. may succeed. On the other hand

Cyn. Tons. has very seldom shewn G. tendency. Dr G. been only one instance of it out of perhaps 500. The specific contagion seems therefore to lead to G. Measles have been found with G. tendency, in very bad Epid. seasons. Same has been observed in Pneumonia. But G. may also occur when no specific contagion, as in comp. fracture, gun-shot wounds & Levery solids may be killed by over extension, & consequently may putrefy, so will the effused matter along with them. The parts may recover also after they are far gone in G. In Typhus in bad Epid. red spots from pressure are apt to run to G. tho often G. without almost any warning by red spots - In this disease the vessels so much impaired that death of vessels easily brought on. It seems therefore probable that there is something in the state of the atmosphere, & contagion which favors tend. to G.

In Gangrene tend. the G. sometimes spreads higher below the surface than appears on the skin.

Hence danger of amput. in such cases - May only hasten death of P. —

Habitual indulgence in Spir. Liquors, especially in dram drinkers has a strong effect in inducing the G. tendency. This arises from the general diminution of the vital principle in all their solids, as is indicated by the weakness tremors &c of such people. - Same tendency may be observed in the Ld P. & in very old people in whom vis Vita very much diminished. This tendency may exist for months (the G. may exist for months) ~~before~~ it prove fatal; & it may prove fatal when G. has made very little progress.

G. parts sometimes dry & hard - Necroses.

pressure on part destroys vital principle, & ulcer. This dead part may come away. - This happens sometimes in the G. spots in Typhus in Burns which kill part, without producing Erythema.

killing of part by pressure one instance of dry G.

G. in parts killed by cold is white.

The indications of cure in G. must be formed

upon the state of the vessels. In violent action of vessels the strongest antiphl. remedies necessary. In great debility the opposite. The tendency of G. to spread must always be kept in view. G. stops by the beginning of new infl. between the G. & sound part, & this new infl. running to suppur. G. part seems to give such a stimulus to the neighboring parts as to inflame them. This new infl. may possibly also be excited by art. as by hot dressings, or scarifications. — These not now much used, especially the first. G. is to be apprehended from every violent infl. as from large violently inflamed Phlegmon, but more especially from violent Erysipelatous infl. Sympt. of its approach are change of color from bright to dark red — to livid or black — blisters running on the inflamed part. When G. has come on, part becomes soft, flaccid, insensible — pain decays, or ceases, sometimes very suddenly, as in G. of bowels. Part becomes cold, & emits a most fetid smell. A G. not the size of the nail of a finger will taint a whole ward in an hospital. This not a putrid smell, tho very near it.

The pulse grows weak, with general weakness of body. face pale, & of a peculiar appearance - features grow sharp, collapse - sight fails, or P. grows blind. Sometimes however there is no stupor or coma, or failing of senses. Internal senses remain entire after g. has made great progress. Seldom P. lives more than 12 or 14 hours after g. of bowels comes on.

Very small g. may be fatal. g. of one or two lbs, or spot not larger than half a crown has been speedily fatal.

The last termin. of Infl. is Scirrosity.

It may occur in glands, liver, tonsils, mamma. It is hardly an object of med. practice. It may happen without previous infl. - In Infl. of glands we must have a view to this termin. Sometimes there is constitutional tendency to scirr.

Prognosis in Phlegmasia.

The prognosis is more favor. in Phlegmon than Erythema. Phlegmon may generally be either discussed or made to sup. well. But in

large Ph. there is always danger from Pyrex. such
Phlegmon may also be fatal thro mere wasting - P.
may sink under it from the discharge. sometimes
danger depends on the seat of the disease. pust. of face
may spread, & excite deliv. & death, even without
phren. by mere irritation of pain. Phleg. in neck
(or Cyn. Parot.) may also be fatal by bursting
into the trachea. so also infl. about clavicle may
find its way into the thorax when Lymp. very
bad. May be danger from erosion of a large
blood vessel. This is not common. tho it has
happened as in venereal bubo eroding femor.
artery & producing death in a minute.

The great danger of Erithema arises chiefly
from its tendency to Z. Even when it sup. it is
of the worst kind & often grows fistulous, so
that diseased part hardly ever recovers. Pr. the
Erithema wh. accompanies Erysipelas generally of
little danger, unless it be extensive, or in the head.
Erith. from scald also not dangerous unless great

portion of the body has suffered, as by falling into boiling water or on it, can it is generally fatal. Even large scald on limb danger from tendency to G. & G. in consequence of Constit. always to be dreaded, as the P being weakened by previous disease renders G. more dangerous. & large G. is almost always fatal.

When sur. follows infl. prognosis always bad. for sur. tumors are always of difficult resolution & commonly impossible to be resolved.

Plan of Cure.

In Infl. as primary disease our object is first to procure resolution. When that fails to obtain a favor. suppur. But G. & sanious are always to be avoided.

1 Indication to remove remote or occasional cause when they known & can be accomplished. As splinters, chemical acids, poison, Luxation, compression &c. formerly red precipitate was used to remove ven. buboes but this unskilfully managed often produced violent infl. fever, id. tendency to G.

g. did often occur. Unless therefore skillfully managed this practice should not be tried. Lunar caustic less dangerous.

Second indication is to remove or prevent general fever. by taking off the Phlog. Diath. particularly by low cooling diet. & other parts of Antiphl. regimen. If general fever be strong general bleeding may be necessary. As in swelled testicle when great heat hard frequent pulse accompanied sometimes 10, 12, or 16 ℔ of blood may be taken according to strength of P. & afterwards topical bleeding according to strength of P. So also in compound fracture when there is tend. to deler. general bleeding necessary. In less violent infl. topical bleeding will answer better. This is a powerful remedy when properly applied, using from 10 to 20 leeches, & continuing the bleeding for several hours, & repeating operation as circumst. require.

Purging useful for some purpose, especially the cooling saline purges. as in infl. of Mucat.

The same treatment is applicable to all the Phleg.
as of Mamma &c

Various Sedat. applic. may be used externally
particularly preparations of lead – Vinegar &c In
some cases lead has great effect. Saccharr. Sat. or
Aqua plumbea generally relieves Ophth. So Gonor.
virulenta will often be cured in few days by
injections of Sacch. Sat. Effects of lead in Arth.
do not correspond to these. It does some good
in swelled test. or Venr. bubos. But Sacch. Sat.
does not agree with all constitutions. In some
few P. it always aggravates the inflam. Sym.
. When then brisk solut. of Sacch. Sat. sometimes
gives great pain. Then this remedy not
always to be relied on. When applied
should be frequently renewed. Other applic.
are Solut. of Sal. Am. or Sal. Am. ℥ss. to
Vinegar ℥j. Cerussa acetata, Poultices with
cicuta in them – this last has not always
a good effect. – If resolution intended all oils
ointments &c are pernicious. In erythema

some of the oils have a good effect. So soap made of linseed oil & lime water. But to promote resol. sedat astringent applic. better than oils, poultices, & emolients of any kind. Oils & other emolients however give relief in scald. Opiates of great use to resolve Phleg. not applied externally, but internally. They act by lessening irritation. On same principle they are of great use in compl. fracture, gunshot wounds, swelled testicle. Opiate applied to Eye has cut short Ophth. But opt. do not supersede the use of other applic.

When rigor & shows the begin. of suppur. we must then endeavor to prod. a favorable sup. Must avoid all great evacuation. Antiph. Reg. must not be too rigidly adhered to, unless impl. be dan. gerous from its violence. A considerable degree of vigor in the constit. is necessary to the formation of good pus. By good nourishing diet people have recovered of compl. fracture, wounds & c., would not heal under low diet. But dangerous to trust to this practice, it may easily be carried too far. The Bad effect of very low diet is evident in the bad small pox. A more cordial

ryemen, with warm & per. B. will often produce a favorable change in state of inflt. & a good sup. Some old vener. ulcers cannot be cured by Merc. in any length of time under low diet. Better diet allowed ulcers will heal without Merc. The peculiar poison may be destroyed by the Merc. without healing the ulcer. To promote sup. part must be kept properly warm. by warm poultices frequently renewed &c. — Cupping has been tried to promote sup. but seems to have contrary effect. Burgundy pitch plaster when phleg. is mild as not to confirm P.

There is no general rule about opening of Phleg. sometimes if not opened they will prod. fistulous sores. At other times they heal the more readily that they are allowed to break spontaneously.

When G. begins to appear whole vrol. inflt. contents must follow antaph. regem. But in general that stage of inflt. is over before G appears, & the contrary state soon takes place.

The contrary course will therefore be generally recap.
In bron al remed. are spec. B. & Verne to support vis vitæ
thus lited very freely. If W. cannot be held, or will
not remain on Stom. we may give various stim.
aromat. spirits diluted &c But Bark is the most
powerful remed. for G. ℞ iij may be given in the
space of 24 hours. ℞ ss has been given every two
hours. — Serpentaria has been used, but of inferior
efficacy. Seeds may be found. Drink may be
acidulated — Many resp. antiseptics have been applied.
but they are not to be relied on — They may do
harm by their stim. When the dead matter
can be removed without much stim. it should
be done. Scarif. give too much vent. Terebt.
Myr. & various aromat. have been applied
& may be of service. In some cases of G.
mild sup. poultices do very well. If poultices
cannot be applied, mild wax plaster may.
Embrocation with Vinegar Wat. a a ℞ iij Sal Am.
℞ i — The Ulcers that remain from G.

on very ill to heal. Long after G. removed we should continue the use of Wine & B. — In irrecoverable G. no thing but amp. can avail. This may be done before G. stop, but in this case there is great danger of the stump becoming G. If possible should therefore wait the stopping of the G.

Scirrus — mercury is the most powerful of the deobstruents. It has removed Hepat. or scir. of testicle — Cicuta has also been applied, & w. some advantage, for the same purpose. But scirrhus is hardly an object of med. practice

Of particular Phlegmasiæ

1st. Ophthalmia

This disease is generally merely topical. Tho sometimes it spreads to the rest of the head, & to the Brain. This has happened chiefly in C. from suppressed Gon. after being treated w. Merc. & then exposed to cold. If the C. be prudent, with headach, tenuitas, vertigo &c we may suspect infl. of brain, & must use most

powerful evacuations – As a mere local affection it is easily distinguished. The least motion of eye gives pain attended with impat. of light – from increased sensibility. Sometimes however there is little imp. of light from infl. not spreading back to the retina. Sometimes Infl. begins in back part of Eye, but very rarely. Generally there is increased flow of tears. Also a morbid discharge of a glutinous matter w^h glues eyelids together. Eye lids may even grow together – or lid may be fixed permanently to the eye in consequ. of Infl. – should attend to this gluing of Eye & prevent it, as by the force necessary to open it the eye will be hurt v^ery infl. increased.

Infl. may be either of Membrane, or Eyelid – These often combined tho sometimes they occur separately. The first kind may arise from smoke, or any irritan. The last is generally mod. of Scrophula. Hence loss of Eyelashes, which always indicates Scroph. Habit. The two disorders are easily distinguished. The Scroph. lasts long, is often hereditary, the cure difficult, & the indication different. Scroph. habit will not bear the evacuations w^h are often necessary in C. membranarum.

In violent case O. may produce heat, strong pulse &c — generally there is heat in the part, sensation of flies dancing before the eye. Musca volitantes from mucus disturbing the sight, or from infl. spreading backwards. Then there is pain, redness, swelling, dimness of sight, sometimes serous discharge, & sometimes dryness, but dryness not near so common as the other. But there is mucus discharge in both cases. In violent infl. it extends apparently into head, & brain corresponding to the affected eye. Hence general headach hypnopa, vertigo, tremulus, delirium. These febrile sym. were in P who had O. from Gon. retained after the eye was lost, & proved fatal. The brain shewed evident marks of infl. w. watery effusion —

Infl. of one eye often succeeded by that of the other. The general cause had been applied to both the begins first in one — the same in Cyn. Consel. This most commonly from scrph. Great sympathy also between the eyes. Hence the danger of Operating on blind eye — may prop. infl.

O. never terminates in S. very seldom, tho sometimes

it suppur. Jr vol. & Memb. may be effusion into humors of eye, or hydrophthalmia. in this case the sight is irrecoverably gone. Sometimes also pus formed in eye, & makes it protrude — should in these cases be opened to remove the deformity.

C. generally requires very act. practice. Blindness may happen from mod. C. may be either effusion, or opacity of cornea, congestion may cause great pressure on opt. nerve so as to impair sight, or produce Amaurosis. Scales may form on eye, & impede sight. These specks may be either raised on cornea, or be only dark spots in it. — We should always regard this as a probable termin. of C. Such scales may be scarified round & come out, if raised they may be cut off, but they will in some cases grow again.

Resolution of C. seldom connected with any discharge, except sometimes ch. diarrhœa. Hence moder. purgery to keep body cool, & prevent flow to the head must be of advant. tho we may distrust general evacuations in C. — C. sometimes becomes constitutional — chiefly in Scrofph. habit. There may

however be permanent redness of Eye from relaxation, when no scroph. taint, & wd. does not amount to O. This may generally be removed by astringents. So Cyn. Lon. will leave enlargement & redness of velum pend. Uvula &c for long time.

O. Sarcii has been removed very speedily by Electr. but in these cases it gener. returns.

Causes — all causes of infl. applied to eye may give O. very slight mechan. violence, as burning in a hair of eyelash. Great wind, very bright light as looking at Sun, travelling in snow w. sunshine &c dust - from small dust flying in air said to be 4000 blind men in Cairo. Peasants without scroph. may become blear eyed from living much in smoke. Intense appl. of Eye as reading small print, working fine work &c — Hard drinking chiefly spirituous liquors - These, in all ways, lead more to O. than malt liquor or wine. Many People show by the redness of their eyes when they have drunk too much. Internal. pain of eye has been felt, which is taken to internal. head ache. Infl. of Eye has been sometimes Epidem. from general prevalence of cause

& sometimes it has been observed contagious. — Certain acrimonies in the mass of the blood has been supposed to give rise to O. This is at least hypoth. But any thing that promotes flow to head may occasion it in those subject to it — as straining during costiveness — hence frequently those subj. to O. keeping body open. So dyspnea cough &c may tend to O. B. has also been observed connected w. Hemor, & intermitting with it. And sometimes w. costiveness (as before) B. has also been observed connected w. Hemicrania. W. tooth ache, w. Rheum. from the infl. spreading. Often merely symptomat. as in Typhus, in contagious catarrh in measles in S. Pox. In two last diseases O. may be very severe, may induce blindness — may become constitutional. — Gonorrhea produces sometimes the most viol. O. known (Schweidauer.)

Cure of O. Mem. same as in Phlog. O. Force bears evacuations worse, & requires them less. —

Must first remove occasional causes, if this can be done. as hair turned in, smoke &c — dip face in water & move eyes, in case of dust being in them. If infl. continues.

violent, when there is much gener. fev. hemeran. or, bleeding is the first remed. Generally however, bleeding is not necessary, at least gener. bleeding seldom necessary - Topical is much more efficacious. 6. 10, or 12 leeches as near eye as possible, & the bleeding of wounds continued for a considerable time, several hours. Often 1 tsp. bl. thus employed will be sufficient to ~~[illegible]~~ inflam. But sometimes it may be necessary to repeat the operation several times. Cupping might do equally well. 10 or 12 ℔. which might easily be taken away by a skilful operator, would generally cure. But in the clumsy way in wh. it is generally practice it only would torment P. & do very little good. Arteriotomy, in branch of Temp. Art. has been practised with advantage - Bleed is easily stopped by slight compression, if it does not stop spontaneously. Bleeding in jugular vein has been tried. — Scarifying adnata albugenea, or cornea - This is a painful operation, tho not so rough as might be supposed. Incase of scales forming scarifying is of great effect. When scale

begins to form scar. may save eye - but little is to be expected from it if scale has been long formed.

Gobery larval. of use, at least keeping body perfectly free of much serum. But much purging would only weaken P. without doing any good. - Blisters to nape of neck, to back, to throat, or head have given relief. But they are not near so powerful as topical bleeding. Blister applied all around eye, lint being placed on the eye to save it, has done good. In habitual C. use of issue or seaton has kept P. free from it. Some times emollient applic. will do good, as when infl. from chest & washing it w. milk & water warm, may be useful. But in severe C. this not worth while. Repellent refri, gerant astringent applic. do much better - cold collyria cold pen, cold water cerussa acetata, or Vit. alb ℥ss aqua distil. ℥VIII M. - or cream of bread moistened w. such solution. - Solution of sea salt combined w. opium. If there gen. irritation they must

be made very dilute. – Saturnine poultice may be used. Lead more benef. in O. than in any other Phlegmodyn affec. dropped into eye have given relief. Bread draught at night has good effect.

P. must be kept from every degree of light that gives irritation to eye. & from motion of eye. Often necessary to keep him in totally dark room – in less violent case shade over eye, so as not to heat eye. The only one P. affected often necessary to prevent use of both

In habit. O. shaving head, & frequently washing it in cold water does good. Promoting perspirat. for same kind of O. P. should wear flannel. keep leg & feet warm & dry. cold & moist. will often induce the disease. Evacuants from nose by snuff has been useful in relieving const. O. – Various stim. appl. to eye, to alter condition & action of the vessels. Often Dly. used only electricity. This has given great & sudden relief in O. Torp. but in general its effect transient. If W. Vitr. be applied after Elec.

it might give a more permanent relief. But we should also keep it in view that in some cases Electricity has done great & sudden mischief. Brandy & water has done good in const. C. — Mild ointments useful to prevent gluing together of eye lids in the night. Some acrid ointments have been used. Alum. W. Vitr. verdy. red precip. of either of these 1 pt. beat up with 4 or 5 pts sugar & blown into Eye. But better to add them to oint. & rub eye w. it. or give them in solution in water, Aqua Lapphennae, or blue vitriol beat up w. white of Egg. — When C. is from Lues nothing but course of Merc. can cure when from scrophl. Per. B. Chalybeates, cold bathing, super. waters, country air, exercise, & the cure will depend much on the season. When scales form, or effusion of serum between lamellae of cornea must be removed by cutting, or by escharot. Effusion has been said to be removed by absorption. & hence Merc. course has been ordered to promote absorption & remove obstruction.

In these cases the mouth is to be moderately affected, & the affection kept up for some time. Or the merc. may be employed as cathart. at same time.

When specks form either must employ escharotics, or cut the speck out, or divide vessels wd. run into it. Red precipit. has answered very well first 1 pt. precip. to 15 water. then $\frac{1}{10}$ precip. corros. sub. also grij to ℥ij water. — The use of these escharot. depends on this principle that the life of these morbid growths is not so strong as that of the natural parts & consequently a poison wd. will not injure the living parts, may yet destroy the living principle in these morbid parts. Thus corns warts &c may be removed by frequently touching them wd. mallet so slightly acid as not to erode the skin as Vinegar. Sometimes rough pointed powders have been employed: these indeed may put out the eye, but sometimes they will destroy the specks without permanently injuring the eye. Thus equal parts of pounded glass & sugar candy rubbed together & blown into eye. — If suppuration or adhesions nothing but the scalpel can be of use (see Cullen, Benj. Bell, Sauvage)

Phrenitis

This a very uncommon disease in this country. Other affections may have been mistaken for it. There may occur, coma, delirium either low muttering, or violent & furious without inf. And id. Infl. of Brain the delir. may be more of the typhomania or coma, than of the fever chl. – Said to be often from Insolation. Insol. may be fatal in few hours, tho perhaps not always from inducing Phren. In W. Cl. Insolation not uncommon – from fatigue as well as from heat of sun. Thus in Amer. War on some very long painful marches several instances happened. And in Gen. Goddarts march across Carnat. of 1200 miles. After butchery huts at night some of the soldiers would lie down & die in very short time. But this did not seem to be Phr. for those who were bleeded, id. the most powerful remed. in Ph. all died; & most of those who were treated in an opposite manner recovered. Probable therefore that insol. is not fatal by inducing Phr. but by inducing opposite state of debility.

The sym. of Phr. are violent sudden fever of infl. kind, great heat, frequent hard strong pulse, flushed face, redness & swelling of eyes - acuteness of hearing & of sight - impatience of light - total want of sleep for several days - throbbing of temp. arteries - fierce look - violent headache, delirium - furious deler. generally great muscular strength - great thirst dry parched mouth. — The progress of the disease is very rapid. generally it does not last beyond the fifth or seventh day. It terminates commonly with some great discharge as of sweat, epistaxis, hemorrh. menorrhia &c. Those who die infl. sometimes die in state of coma, & sometimes of convulsions. It sometimes leaves permanent mania, vertigo &c.

Bad prognosis arises from violent vomit. chiefly green colored, suppression of urine, grinding of teeth sometimes insensibility to thirst - furious deler. &c. from to infl. on those who approach them suspicion of an obstin. notion that there is some thing poisonous in the food or drink

Disease said to arise from Pneumon. or Pleurisy, or S. Pox, or Angina from metast. of infl. affection.

Phr. chiefly disease of youth. Meth. habits. hot clim. & in hot weather. All causes that induce infl. disease may cause infl. of brain which may approach nearer or be more remote from Phr. according to circumstances as to the habit of body & manner of life. Habitual intemp. or even a single debauch may give Phr. violent exercise, violent pass. as anger – suppression of usual evac. as hemorh. stimulat. medicines or light, or noise in infl. fever. violent study or business interrupting sleep – tho this tends more to mania. Insolation. Turban best preserv. from insol. & one black hat the worst. External violence, as fracture of skull. or suppuration of brain from whatever cause.

Dissections shew infl. of brain in this disease or of coats of brain. Pia mater has been found hard & thick like dura mater. Abscesses have been found effused serum even gang. – Same symp. founded mania, in lethargy, palsy, apoplexy, hydrocephalus intern. Therefore these appearances give no light into the proximate nature of the disease.

Disease of very great danger. Cure nearly same

as in hydrocha, but the quickest & most rigorous application of antiphl. regim. necessary. General bleeding chiefly to be relied on, large, early, repeated. blood from large orifice, or open two veins at once. whole P. in erect posture so as to induce syncope. Thus by quickly lessening flow to head may do good. May bleed either in arm, in jugular vein, or in temp. artery. – Topical bleeding by cupping in the temples, or round whole head. Head to be shaved & washed often. Blister may be applied to head – & to prevent danger from blister causing flow to head, should use large repeated bleeding before we lay on blister. Fomentation of feet may act by revulsion. Pouring cold water on head instead of blistering it. or clay cap – w. the best method of applying permanent cold – even snow cap if it can be had. The very lowest diet, or absolute fasting – plentiful dilution – purging by saline cooling purges, or by glysters of same kind. Erect posture to lessen flow to head. Op. of doubtful effect except after large evacuations – Every attention to keep P. easy in mind soothing him, avoiding every irritating subject, & various other expedients to please him as Music.

Cynanche

Sometimes fever of the Typhoid kind as in Cyn. Malig. sometimes infl. as in Cyn. Tonsil. Generally with febrile symp. P. complains of pain in throat, which is increased on attempting to swallow. Often we can distinctly see the infl. but sometimes it may be so low down that it cannot be seen, as in Cyn. Phar. Sometimes there is no redness in fauces, as in Cyn. Trachealis, only sense of tightness or choaking —

Cynanche Tonsillaris. —

Redness, swelling, pain, chiefly about tonsils, uvula & velum pend. Sometimes Infl. spread over whole throat, & even into mouth, difficulty of swallowing. On attempting to swallow liquids they may come out at the nose — or may excite violent fit of coughing by getting into the trachea. Swelling may be so far back that P. cannot breath thro nose. Pain may be either extremely acute, or sometimes dull & but little troublesome. This disease often

gives great quickness of pulse, tho there be very little danger. Often also very little febrile appearance - so that P. will not confine themselves, & thus may make disease much more troublesome. Hence P. should be confined to bed, or at any rate to the house. Pain sometimes shoots from throat along Eustach. tube into Ear - Insfl. may be communicated along Eust. Tube. Sometimes there are Vomiting & indistinctness of hearing - often copious viscid salivation, because P. cannot swallow for spittle. - Insfl. often on one side - afterwards leaves that & goes to other. - Generally great frequency of pulse & little febrile symp. besides.

Disease sometimes terminates by resolution. & sometimes deep copious suppur. Tonsils may be enlarged to size of Egg. Sup. may break to low down that pus may get into stom. so that we cannot judge of extent of ulcer. When Imp. or some bronch. symp. immediately relieved. Pat is maintained, bitter, feeble. - Sometimes several

small importance w.h. burst successively. Sometimes only small white spots, probably dilatation of shutten from infl. vessels, which resemble aphthæ, & may make the disease be mistaken for Cyn. Malig. No then be no danger. Indeed these spots occur only in slight cases of Cyn. Ton. – The blisters w.h. sometimes form on inside of the lips have same appearance w.h. these spots. They are small, pellucid; not dark & opaque w.h. the dark erysipelatous appearance of Cyn. Malig. From their appearance, & from the general symp. of disorder may easily be distinguished from aphthæ of Cyn. Mal. – Pty. had the right tonsil inflamed w.h. these spots on it for 3 months together, & never so violent as to confine him. In deep seated ulceration pain is sharp & pungent – In the superf. aphthous Cyn. Ton. it is dull, rather sense of tightness than pain – great relief when spots rubbed off.

Pure infl. Angina very seldom runs to g. Pty. saw one case in w.h. it had this termin. P. recovered tho very slowly, lost uvula. No contagion could, in this case be traced, or suspected.

throat has run to ∂. from very slight violence. A young English nobleman lost his life in a few days from taul of barley corn sticking in his throat & run very speedily to ∂.

Tonsils sometimes left scherrus. Sometimes swelling, redness, even discharge of blood remain after acute infl. gone. This more remarkably after repeated attacks of the disease. This generally yields pretty easily to astringents.

Prognosis favorable. Dr G. never saw fatal instance, tho such instances have occurred. It should not however be neglected, as the infl. may spread. This indeed is almost the only danger. If that been said to spread down to the lungs & produce pneumonia. This undoubtedly is possible, tho very rare. If irritation be avoided disease will generally go off of itself. But this slight affection, if P. exposes himself to cold, lives intemperately &c may become dangerous. Worse & all chron. do harm.

The danger is said to arise from suffocation. Such cases have happened, as to a friend of Heberdens, in

whom he advised Bronchot. but it was delayed till too late - P. died in 36 hours. Suppuration may also burst into the Larynx & suffocate P. Cyn. Trach. may also be united with Cyn. Tonsil. & P. may be choked. In long continued cases also when swallowing lost abstinence may be too great - may continue for 10 or 12 days & P. may sink under exhaustion. Fev. may be dangerously violent even fatal - May be combined w. Cyn. Mal. or Typhus & P. may die in ordinary course of fever. When danger is great of suffoc. Bronchotomy should not be neglected - It is of no danger, tho there be great prejudice against it. But cases may occur in w. the swelling may be so great as to render the operation impracticable.

Disease chiefly of Youth from Puberty to fourty, tho not confined within these limits. Old people may take it, & those under puberty. Disease of sanguine temper. Those of fair hair & skin more subject to it than those of dark complexion - Plethora

people most subject to it. & those subject to hemorrh.
disease of cold changeable weather - occurs mostly in
winter & spring, & in cold or temp. clim. Plet.
very uncommon in the torrid zone. Predisposition
is formed by having had the disease - perhaps
from peculiar irritability left, or from increased
determin. of blood - or from weakness of part - or
from these circumst. combined. The same happens
in Rheum. Gout, Pneum. - Women not so often
affected by it as men - nor cured by any in-
flam. affection - perhaps from Menorrhea -
Disease is occasioned by cold generally applied.
In these cases the weaker parts will be parti-
cularly affected. The cause be general over body.
cold, or stream of cold air about head or neck
most apt to induce it - cold or damp feet.
general cold of body chilled or weakened befor
many things may concur - whatever tends to the
insp. death. violent exercise, perspiration - leaving
off usual exercise &c - May be two or three
days after cause applied before the disease appears

said to be propagated by contagion but this very unlikely. frequent changes of weather may render it almost Epidemic - Sore throat may also be connected wd. contagious diseases, as Measles, S. Pox. Scarlatina - Mild Cyn. Mal. may also be mistaken for Cyn. Tonsil. But it is extremely improb. that pure infl. sore throat ever arises from contagion.

The Practice is as in other infl. diseases - If much general fever great heat or general bleeding may be necessary especially if great head ache & strong pulse. ℞ x or ℞ xii may be taken. The practice is safe. But as this disease may be mistaken for Cyn. Mal. bleeding is to be avoided except in strongly marked cases. - In ordinary cases bleeding quite unnecessary keeping in bed to promote perspiration will be sufficient. If disease more violent topical bleeding may be used. Cupping under the chin - or about Fauces when it can be well done, or leeches. This practice proper when the topical affection is violent in proportion to the general fever. Or in this case puncturing Tonsil.

But blisters are perhaps preferable to topical bleeding. In almost all cases blisters would cure, but in mild cases they would produce a disorder as bad as the disease. If applied at the beginning they would almost always relieve, but many would rather have smart Cyn. Tons. than be confined by blister. If applied after sup. begun they would be too late - might break before blister rise - this once happened to Dr G. - Hence applications &c. operate more suddenly may be more proper - as Vol. alk. & oil. Oil ℥ij Vol. tart. alk. ℥j - milder rubefacients as sinapisms may answer in order. cases. But care should be taken in applying them to cover parts well up - not only to apply them to neck, but to cheeks, & bring the flannel over the head, as well as round the throat. Emollient applications may be useful if these not thought agreeable. But they should be frequently renewed. Poultices if not frequently renewed do harm. They soon lose their heat, & by their evapor. make parts colder than natural, & they very hard

generally keeping parts well wrapped up in dry flannel will be safer. particular care must be taken to keep the neck & head warm. Inform. Emolients to parts or gargles have been much recommended. When they can be applied they are very useful. But cases may occur in which the parts are so hard & stiff that to gargle them is impossible. In such cases should not be attempt. as vexation must do harm. Simplest gargles as good as any other – warm milk & water – infusion of linseed & sugar candy – figs infused Honey, – currant Jelly – or Honey vinegar & water – steams of w. water, taken into mouth, then snuffed inhale or a funnel, so as to moisten throat perfectly. – Instead of Emolient gar. astringent have been employed. Tincture of roses, of per. Muriated small quant of mur. acid. Port & water as good for this purpose as any that can be employed. Solutions of nitre have been used for same purpose.

At beginning of disease tartar. may be useful by its shock. — Tamarinds w. senna infused will be strong enough as cooling laxat. or salem purge. But keeping body open by laxat. diet generally sufficient. Perspiration should be promoted by moder. warmth — by drinking plentifully of diluent liquors or even by sudorif. Med. by frequent pediluvium — by keeping in bed. P. must be very careful in avoiding cold. should also avoid all irritation from whatever cause — buisnesses &c. If tonsils left scirrhous nothing will avail but surgical operation — for w^h, see Bells Surgery.

Cynanche Maligna.

Cyn. Mal. & scarlatt. angin. only different degrees of same disease. The difference between them is not greater than that between distinct & confl. S. pox. Br Jeffl. & Watsons, — pulled Measles. The different symp. are found in every different proportion to one another. They may exist separately or nearly so, & both may be combined in very high degree. Br there may be very much

affected, & throat very little, & vice versa, & all the intermed. shades — the disease still proceeding from one & the same contagion. — Repulsion of the efflorescence does not stop progress of fever. But the appearance of it generally relieves febrile symp. some in measles.

This disease but lately known. Sydenham knew nothing of it. But in 1699 Duke of Glocester died of it. Physicians mistook it, & treated it wrong. Dr Ratcliff was called, & he abused the Phys. for their ignorance, so that he must have met with it before that time. It must therefore have appeared soon after death of Syd. for a considerable time afterwards no mention is made of it. But in 1739 the attention of Phys. was again called to it by Mr Pelhams two sons dying of it. From this time it has been generally known. But much later before it reached Scot. Dr Gregory the father never saw it in Scotland. Tho he had in Paris & London. Gregory the son first saw it in Scotland in 1778. Since that time it has become frequent. He has seen 30 or 40 P. in it in course of few months. In some parts of Scotland not yet known.

within few years an experienced Ph. in west of Scotland met wth. first instance of it, w^h he mistook, bloodied P. & that not relieving he tried another bleeding — the P. died well he was tying up the arm. In some of Northern counties it has not yet been observed. Hardly ever sporadic instance of it found.

It was long disputed whether P. could take disease oftener than once. It is however certain that it is not entirely on a footing in this respect wth. S. Pox. Dr G. seen two undoubted instances of P. having it twice. But the having once had it renders less apt to catch the contagion.

Prognosis — Disease always dangerous, death sometimes happens in two or three days. Sometimes contagion mild, & hardly any danger. At other times the epid. virulent & highly dangerous. In children worse than in adults, & in weakend worse than in strong const. If the disease stops 5 day danger not so great. after 9 there is little danger. As the eruption practically critical, care should be taken not to repel it. — It is always a bad symp. when there is much general fever. The pulse

either small & very frequent, or as sometimes happens hard strong & frequent. Much heat, delir. violent headache, coma, tremor, subsultus - vomit. diarr. when violent, or when they continue after eruption, - or heavy cease on the eruption, afterwards return. State of throat when ulcers large, dark spots, much swelling - external swell. leg of face, dyspnea, want of efflorescence or sudden striking in of efflor. after it has appeared - All these are bad Sym. Copious & permanent efflorescence favorable - yet Pt. may die in this state. - Too much exposure to cold may repel efflor. & should be avoided. Not necessary to keep Pt. very warm, but should be kept in a gentle temperature - Bleeding, purging, purges. Nitre & tart. repelled efflor. & should therefore be avoided - Gentle sweat favorable. Suffocation sometimes comes on from presence of exfl. on Larynx - this always to be dreaded. Sometimes brain much affected from the begin. hence great & often sudden danger. - Sometimes ulcers run to complete g. & may be speedily fatal. Tears sometimes exfl. this generally sight.

pipe. may spread to Larynx & Trachea – the preter natural membrane of exhaled mucus may be formed thus indicated by wheezing cough, & sudden dyspn.

The disease is peculiar both in its seat, & in its cause. When it has once been introduced it continues to keep its ground. Hardly ever see detached instances of it. generally epidemic We know not that it ever proceeds from other cause than specific contagion – It seems to have come from the Levant or africa thro Sicily into Spain, & to have been from thence propagated.

The antiph. regimen tho strongly indicated at beginning of disease, always does harm – Gen. bleeding universally hurtful, sometimes immediately fatal – topic. bleeding by leeches even generally does harm. Purging also hurtful – it weakens the P. & tends to repel efflorescence. body should be kept open by mild aperient food & drinks not sufficient, the very mildest purgative too fatal enough – If Disease taken at the very beginning

a vomit may cut it short. Often Emet. disrupts incipient infl. but after 2. or 3 day P. too weak to venture on Em. & indeed little good to be expected. The indications are to support moderately the vis vita, & obviate tendency to G. — For this purpose Wine & Bark the only remedies to be relied on. Wine may be detected w.d. lemon juice & syp. should be given not in large quant. but pretty freely. Yp to Ypij wine, & repeated every two 3 or 4 hours according to the circumstances of the P. — If lemon juice wanting, vineg. or vitr. acid may be combined w.d. wine. —

Gargles of great use by assisting to expel the tarrous deflexion, & preventing its getting into the stom. This matter is acrid, often excorates mouth, & getting into stom. produces violent effects on bowels, as colliquat. diar. The mildest best, or only gently stimul. Wine & water Tinct. of roses, or w.d. little of tinct. of Myrrh. Steams of vinegar taken into mouth. all irritating Garg. to be avoided. — Scarifying

the sloughs, or applying escharot. to them, as Mel Ægyptiacum ℥j. has been recommended, liable to same objection. progress to ℞. after this has been very rapid. — Bark should be given in large quantity. to adult ℥ss. or ℥j in 24 hours to child ʒj to ʒij — May be given in gliskes when cannot be taken by mouth, 5 to 10 guttæ sp. being added to prevent Pt. from coming too suddenly off. — Blisters to throat have been advised, but only an insignificant remedy. Dr Watherey trusted much to Pulmt. sometimes gave 2 in one day.

Cynanche Tracheales — Croup.

Attacks children from time of their being weaned to puberty, but in those who have had it frequently, it often returns at a much later period — 30 or even after it. Disease is easily known from the breathing. The chief danger is from suffocation. There is no ℞. tendency, & very little to suppur. Slough or preternat. Membrane of effused gluten sometimes formed within trachea. And mucus

in form of pus sometimes found between thes mem.
& the muc. mem. of Trachea.

The abatement of Symp. if attended with discharge of mucus, or purul. matter gives favor. prognosis. If no expector. the abatement probably depends on resolution of spas. stric. — from which great part of the danger of this disease arises — & probably will soon recur in all its violence.

Bleeding often gives immed. relief. & when Sym. urgent should never be neglected. General bleeding should rather be in arm, than in jugul. vein, because this last difficult to secure again in young P. — Topical bleeding, as in all infl. should be as near part affected as possible. — Blisters often give relief, & very effectually. should be applied to throat or fauces. Emet. even rougher ones used with advant. when Sym. will admit of them. Body should be kept open & in moderate temperature — Relief has also been given by large doses of asafetida. Case — family near Hawick — all the male children died repeatedly — none of the females — house stood low — near a pond of water pond was drained, & no return of disease —

Cyn. Pharyngea — This most distressing from difficulty of swallowing, & sometimes difficulty of breathing. It seldom occurs as a primary affection. The remedies are the same w.h. those in Cyn. Trach.

Cyn. Parotidea — (Les oreillons Mumps — branks —)

This disease is often epid. & manifestly contagious. The external swelling is generally considerable, the internal is not always great — or so troublesome as to affect breathing or swallowing. Tho this sometimes happens. — Contagion may be distinctly traced. It spreads in the same family — seldom occurs twice. One or twice a considerable number of cases occurred & a few sporadic instances have been found. One woman, an adult died by tumor bursting into the thorax. Antiph. tartar. does not answer. Blisters at beginning sometimes give relief. But bleeding, unless the Pyr. very violent, always hurtful. Often fatal. Keeping parts warm, P. confined. & when swelling great applying blisters to external tumor. — Often swelling of Parot. subsides before disease resolves which often happens suddenly — The testicles swell

 In both stages the resolution of disease the same — an exudation of a watery liquor from the tumor, which is assisted by warmth & avoiding of irritation — & prevented by cold &c. One testicle has sometimes wasted after resolution of disease — sometimes testicle subsides suddenly & delir. comes on wh. often proves fatal.

Pneumonia

This includes inft. of the Parenchyma of Lungs, as well as of the Pleura in all its doublings. Divided into Pleurisy, Peripneumonia, & peripn. noth. But there is no ground for such distinctions. They are only diff. forms of the same disease or rather same affection differing only in the part affected, giving some dangerous sym. & requiring some method of cure. Whenever the inft. affec. begins it is also apt to spread. This is a disease of very great danger, & the more dangerous that in some of its forms it is apt to be mistaken, & neglected. Slightness of Pyrexia

at the beginning apt to mislead P. sometimes there are very few febrile sympt. & sometimes a great degree of them. The state of the pulse depends on the degree of pain. In Pleurisies where the pain is very acute, the pulse hard frequent &c. In pneum. where little pain, & breathing much affected it is often small soft &c. Pain in various infl. diseases affects the state of the pulse.

Nature of the pain also tends to mislead. Sometimes pain amazingly excruciating in a few minutes after the infl. begins, in Pleur. But often there is very little pain (Peripn.) dull heavy pain. sense of weight & anxiety rather than pain.

Degree of cough also tends to mislead. Sometimes cough hard, violent, dry, & excruciating – at other times there is little cough & at considerable intervals – may be mistaken for catarrhal cough.

Difficulty of breathing also in various degrees & from this mistakes happen. Sometimes there is urgent dyspnea, sometimes very little.

The combination of all these causes of error has made many a fatal instance of mistake in this disease. The infl. may have run on so as to be far beyond all possibility of cure before any very alarming symp. of pain, cough, fever, or dyspnea occur. Hence the utmost attention is necessary in forming the Diagnosis.

Perhaps in all Pneum. infl. there are pyrex. pain, or at least oppression & sense of weight - some degree of dyspnea, & of cough. If therefore these symp. be combined, altho all or any of them in a very low degree, we may conclude that a degree of Pneum. infl. is present. — Morabian one fatal instance of mistaken disease - the cough was wanting - dyst on dissection there was redness of lungs, & serous effusion. He was one blooded, & this relieved him.

In Peripneumonia the symp. often slight at first, pulse small & soft, irregular from imperf. of breathing - Oppression not great, & very little pain - rather anxiety & sense of weight - not greater than in Catarrh - dyspnea also not at first great, nor cough — dyspnea seems to depend on slight pain felt on inspiration, rather than on affection of the lungs. Whatever causes cough causes also degree of difficulty of breathing, & difficulty of breathing again increases cough. Difficulty of breathing

often accompanies catarrh - particularly catarrha senilis. Sometimes also in catarrh there is swelling w^th, & over degree of spasm, wth appear. symp. & leads to low degree of Pneum. infl. Both from catar. & Pneum. affec. especially in old relaxed P. - that is from the swelling of infl. parts & consequent spasm, a watery effusion takes place into lungs, or thorax - Hence antispas. relieve such cases. Often also there is spasm with primary Pneum. affect. Sonorous breathing from spasm of the muscles of the Larynx has remained after bleeding relieved the urgent symp. of pneum. infl. - In pneum. also there is often but little febrile oppression & little prostration of strength. P. may sit up, or go about his usual business, for sometime after infl. begun, & perhaps till it has proceeded so far as to be totally incurable. From these circumstances the disease has been mistaken for catarrh, Asthma, hydro-thorax. The two first ended sometimes perhaps into Pneum.

In the other form of the disease, Pleurisy, it is not

so readily mistaken. The pain is generally violent from the beginning. The cough hard dry vexatious. For several days cough depends on irritation. Then effusion of serum which gradually grows thicker, more white & opaque, & streaked with blood. – In whichever form disease appears, they are apt to run into one another, & to be combined in various proportions.

Pleurisy not the most common form of the disease in this country. Sydenham says it is one of the most common diseases. This is not strictly true, tho it is by no means uncommon, nor so uncommon as has often been supposed. It has been supposed less frequent from Phys. having mistaken for other diseases what was really Pneum. Dr. G. has always had some Pneum. P. every year. Has had 3 at one time – from Jany 95 to 96 had 14 cases of it, of wh, 4 proved fatal.

Generally the Dyspnoea soon becomes severe. It seems to depend on straitening of bronchia, either from swelling, or spasm, or tough gelatinous effusion stopping up the bronches of it. P. soon cannot lie in horizontal posture – Must have his head elevated –

- then must be propped up in erect posture - this facilitates descent of diaphragm & makes more room for play of the lungs. - then he is obliged to support himself on his knees, or leaning forward on his knees & hands. - As the disease advances the face becomes swelled, red, livid, or blackish - from the congestion of the venous blood, & regurgitation from the violent cough. These sympts always indicate a violent degree of the disease. There is also an increased flow of arterial blood to the head, as is often indicated by throbbing of arteries, delir. & the congestion of venous blood chiefly gives dark appearance of face. But in this disease the arterial blood also is often unnaturally dark, from the imperfect respiration - the venous blood is sometimes almost as black as soot. - The cough is sometimes attended with expectoration from the beginning of this disease, & sometimes not. This depends on the degree of effusion, or on there being hardly any effusion. Some P. recover with little or no expectoration, but

but this is very uncommon. Sometimes the matter expectorated is thick & fratile, at other times clear & viscid - often with blood mixed. This last generally a favorable sym. - Sometimes the cough continues dry for several days, & then exhalation & consequent expectoration will come on.

It has been long disputed what was the most common seat of the pain in Pleurs. The dispute is frivolous. Most commonly the pain is in the middle of the side, because there the motion is greatest. Pain is much increased on coughing, also most acute on inspiration. Wherever inffl. begins it may spread from pleura of Lungs to that of side, & thence to the intercostal mus. Hence adhesions take place, & very suddenly sometimes in 24 hours. The spreading of the inffl. is indicated by pain shooting to shoulder, or across sternum - But inffl. may be very extensive tho pain only in single point. In empyema can P. lies most easily on the sound side - When effusion has taken place lies easiest on diseased side, because

when he lies on sound side, weight of effused matter presses on the heart. In violent & advanced disease cannot lie on either side - must lie on back - then be propped up &c. Cough in the advanced stage often most dreadful, & gives most excruciating pain.

Pneum. later every other infl. admits of resolution, even of spontan. & very speedy resolution. Spont. resolution has happened as late as 7 day - may been said as late as 12 or 14 day - But after this period, or indeed a much shorter period, resolution is hardly to be expected whatever means be employed to forward it. Disease should never be trusted to spont. resolution, however mild the form in w. it appears. The most powerful remedies should be employed, & as early as possible. If taken early it will generally yield to remedies if allowed to go on 3 or 4 days it generally baffles all attempts.

Sometimes there is spontaneous remission of the sym. for which we cannot account. The P. will think himself out of all danger, & the disease will speedily return & prove fatal. Must be

on our guard against this deception.

Resolution is generally attended with copious, easy, & often bloody expectoration. Sometimes with remarkably thick cream like purulent urine. Sometimes copious, warm, general, then sweat gives warning of the approaching resolution. Sometimes resolution connected with hemor. Epist. hemorrh. Menor. Diarrh. also said to relieve disease - may have some effect. Cutaneous eruption also has been said to be connected w/ resolution, as also suppur. of some external part, the morbid matter being said to be translated thus last at least very doubtful - Nor are any of these symp. to be entirely relied on except the expectoration w/ gives a sure indication, especially if matter w/ was thin at first, becomes gradually thicker, more white, opaque, & mixed with blood.

Disease terminates sometimes in suppuration. when it has continued long as 10 to 14 days - when no symp. of resolution appear - when it has been seven - when the pain begins to remit without any expectoration. When cold shiverings are felt -

and afterwards a regular hectic is formed — when the dry cough commences, which is encreased on motion — when a sense of weight is felt in the breast, & the p. most easily lies on side affected, we may conclude that suppuration has taken place. — This termin. Dr G. has seen completely formed & P. recovered, but this very uncommon occurrence.

When sup. formed, P. may be suffocated by bursting of tumor into lungs — or Matter may pass by purulent expector. and all the sympt. of Phth. & hectic may be formed. Emphysema may also burst into cavity of thorax — said to have been absorbed & deposited in some other part, & then discharged — or it has made its way thro the muscles of side to the skin & been thus discharged — But all these effects very rare, & have been magnified. Dr G. saw one P. in which operation was performed — vast quant. of pus was discharged — P. was relieved for few weeks & then died. Indeed when tumors have proceeded so far in Lungs there can be but very little chance

 of a recovery - perhaps hardly a possibility left.

Pneum. may also terminate in G. But this very rare. In very bad habit of body as in those who have long been at sea, or who have scorbutic habit this termin. may occur - There may also be a G. tendency combined with the termin. by effusion.

Effusion or exhalation into the lungs is the only other termination of Pn. At first the matter effused is serum - the expectoration wh. ensues is of a toughish matter - gradually it becomes more viscid, thick, & generally mixed with cruor. When the effused matter is of mod. quant. it will generally be recovered. In a great quantity it must be fatal. This matter is what gives the liver-like appearance of the lungs - the air vessels & pelles are filled up & sp. choked with it. Sometimes matter may be effused into cavity of thorax - In this case there is also a viscid crust on the pleura, & the doublings of the pleura adhere to one another.

The Heart or pericard. may also be affl.

This is called pericarditis – When the infl. is supposed to affect chiefly the pleura of Diaphragm a peculiar mod. of Pn. is said to be formed, distinguished by the name sardoneus. None of these varieties worth attending to – They can hardly ever be distinguished, & plan of cure in all is the same.

Tubercles are sometimes left in Lungs from Pn. Most likely the tubercular state existed before the Pn. Obstructions may indeed be formed wh. may end in Tubers. But generally tubercles are not left.

Prognosis. Always Pn. a dangerous dis. especially if remedies not early applied. If taken at the begin. few will die who have sound const. & are able to bear the necessary evacuations.

The particular progn. must be formed from the general fever, & from the topical affection. These are very much connected – Sometimes however Gn. fev. will run on unabated after topic. infl. subdued. And other parts of the brain may become affected.

And P. may die of Gen. fev. Gen. fev. & Resp. infl. tend to aggravate one another - In this disease there is always a violent action & an irregular determination of the blood.

Bad Sym. are - great Resp. oppression, anxiety, delir. violent, fixed, acute pain - or pain shooting to shoulder, or across the sternum. Pain impeding respiration, or aggravated by cough - The absence of pain however is not always a favorable Sym. as P. may die P. little or no pain. violent cough, particularly if hard & dry - great dyspn. - face red, swelled, livid - this livid appearance first observable in lips - it indicates great danger from very imperfect respiration. Dyspn. growing worse after disease has continued some time so as to prevent P. from lying down - In these circum there often generally partial sweats - feeble irregular tremulous pulse, extremities getting cold. P. hardly ever recover after livid color comes on. Stopping of Expectoration after it had come on, is very dangerous. to an coma, or high del.

Death often happens the first week of the disease but also may be protracted to 10 12 16 days. should

therefore attend to tym. as well as to the continuance of the disease. The favorable termin. is equally irregular.

Predisposing causes. Disease attacks P. chiefly of form tense fibres, strong full active laboring people rather than feeble relaxed indolent. It attacks adults rather than infants, Men as it is said, more commonly than women, from puberty to 50 or 60. It sometimes attacks infants, but in them it is not violent, nor frequent. Some P. have had it in great age. Dr. G. one P. 88

Predisposition sometimes formed by previous disease of lungs, as by having had infl. of them. by deformity. Tubercular state of lungs seems sometimes to give predis. to it. Appt to become constitutional if P. has had it once or twice. Hence such persons should be very careful of themselves.

Occasional causes. Cold, or vicissitudes of heat & cold the most common cause. Hence it prevails in some countries much more than in others. In amer. & Germ. more frequent than in Britain. Disease prevails chiefly in winter & spring. Hence it seems most common in the coldest weather

Cold generally applied to body may give it, or cold air taken into lungs. All causes of general inft. death. may occasion it, as intemperance in eating & drinking - violent exercise - great exertion of lungs in speaking, singing, blowing wind instrument &c but there must be previous disposition to it. — Pn. has been found Epid. in London & Plymouth - this must have arisen from the general prevalence of the occasional cause. It has never been observed contagious. — Sometimes it is symptomatic as in Measles, S. Pox. Even Phth. pul. has been found to induce Pneum. inft. so violent that very powerful evacuations were necessary. Pn. may be effect of external violence as of a blow or bruise, but in these cases it is not apt to become violent. It must however be treated as Pn. — Has arisen from metast. of other inft. as Gout. Rheum. angina - Erysipelas. When Pn. supervenes on any of these diseases it must be treated as proper idiopathic Pneum. Inft.

Plan of cure — The indications of cure are formed upon the Gener. feo. & still more on the topical affection. The same means apply to both indic.

The disease requires the most powerful application of the antiphl. regimen. – Blood letting the first & most powerful remedy, should be from a large orifice so as to draw off a great quantity as quickly as possible. May be repeated in ordinary case three or four times, sometimes much more. According to Sydenham. 40 ℔ at four bleedings sufficient to cure in ordinary case. Often however a great deal more from 60 to 80 ℔. Dr Z from one P. took 1787. A friend of his had 140 ℔ taken in space of three weeks for Pn. – But dangerous to draw away more blood than necessary – treatment P. so much that dropsy is apt to supervene, or Hydrothorax. 14 lb is a moderate full bleeding. Sometimes has taken 22 ℔ at first bleeding. Some P. do not bear bleeding well at first, who will afterwards bear it well enough – 8 or 10 ℔ apt to induce syncope. This must be attended to. If complete syncope brought on P. may seem recover. Therefore when P. turns pale, sick, with weak fluttering pulse, & sweats appearing about forehead, it is time to stop the bleeding. – It has been recommended to bleed to deliquium.

And when this has been done the pain has in some cases never afterwards been so violent. But it is a dangerous practice. From 12 to 24 ℥ according to P's strength & the urgency of the case may be the first bleeding, & afterwards repeated according as the sym. require in number and quantity.

The Disease has, in some cases appeared in such a form as hardly to admit of bleeding. As in the Epidem. Pleur. described by Huxham when the fever was strongly typhoid, w. great pelor, loose texture of blood, prostration of strength, dark spots on body. This Epid. seldom bore a first bleeding well, & never a second. – The form of Pn. called Peripneumonia notha also does not well bear bleeding. The modification of the disease is but ill distinguished. It occurs seldom, & in old weak relaxed people. Such constitutions do not bear bleeding. Peripn. notha appears to be an high degree of Catarrha senilis – or dyspnoea catarrhalis – It may be fatal without showing distinctly marked pneum. inff.

Topical bleeding may be employed in cases where general not admissible. This is not so powerful

a remedy, but it can be more easily born. But topical bleeding should not be employed so as to supercede the use of blistering — cannot both blister, & employ cupping & scarifying the P.'s breast & sides. And of the two Blistering is much the most powerful remedy. Blisters should be applied as near as possible to the part affected. two three or four blist. will be necessary according to symp. Bl. best applied after one or two bleedings, to remove any danger from stimulus w.h blister gives. But if we can have P. blooded before bl. rise, may apply it before bleeding. Even with blisters, Sn. cannot be cured without as much bleeding as Sydenham recommends — Blisters however may save the danger of so great evacuation by bleeding — Will make frean bleedings answer. In some stages of the disease bleeding not admissible — when effusion has taken place & the vessels become less active, bleeding might be dangerous — it relaxes too much vessels, & might thus render Effusion more copious. By sinking strength it would also render expectoration difficult, perhaps

impossible. Blisters have no such bad effects, they rather tend to promote exfoliation, they do not sink the strength, & they tend to render the breathing more free, perhaps from the sympathy between surface & internal parts. In many cases also the infl. may be near to the place of the blister, when it spreads to pleura of the side. Good effect of blist. in Pn. may be illustrated by what happens from them in several deep seated affections. Rheumat. Pain, cynanche, catarrh may be wholly relieved by blister on the surface. Hiccup & vomiting have also been relieved by blister.

Cathartics the next remedy — cooling saline purge is important as taking off general infl. death. But purging less powerful than either bleeding or Blistering. In the very beginning of the disease a pretty smart purge may be useful — but this is only to be ventured on when the Pt's strength is entire. In the advanced period of the disease full purging would be highly improper, both from its weakening effect,

& from its tendency to lose expectoration. It is however always necessary to keep the body gently open at all periods of the disease.

Emetics. Full vomiting is a rough practice, & generally rather a dangerous one. At the very beginning of the disease it may cut short the infl. as it does many other infl. But in the advanced state of the disease it is never to be risked in an affection so highly dangerous. Emetics in nauseating doses have been recommended. This also is a rough practice, a dangerous one, & a precarious. Besides that it might induce full vomiting, the continual irritation wd. it keep up must be pernicious: Nor is it very conceivable what advantage can be derived from it unless as inducing sweat. Even at the beginning full vomit. may be very hurtful if it does not cut short infl. & is therefore hardly ever to be ventured on.

A great variety of what are called expectorants, or expect. & atten. have been recommended in this dis. The matter spit up is highly viscid, so tough that

the smallest particle of it can hardly be brought away by the most vol. & painful efforts of coughing. If therefore we possessed any article which directly tended to attenuate this matter, & facilitate the discharge of it, we should be very glad to use it. But it is at least highly doubtful whether any article be known which possesses this property. Squill in the ordinary small dose is perhaps the best article. Its effect in inducing nausea is not very great, & it has little chance, unless in too great quantity, to prod. vomit. or Diar. Most of the articles of this class seem to act merely as stimulant. Various gums & aromat. & mucilaginous substances, & oils have been employed with this intention. Gum. Arab. Myrrh. Bolat. alk. Spermaet. Sweet oil. Gum Tragac. Liquorice, Radix alth. The chief effect of such art. is by smearing & sheathing the fauces to save them from the effect of the ext. air. The fauces much irritated by the cough, & the free application of air to them apt to excite coughing. These art. preventing free appl. of external air, tend to mitigate the cough. What effect they can have as attenuant or expectorant after they are dissolved in stom, & mixed w. mass of blood is not

easily to be conceived. Expectoration is best promoted by relaxation, & then gently supporting vis vitæ. However Expect. need not be altogether neglected, Ϟ. asal. or Squill mixture will answer all the purposes – Syrups create thirst, & only mixt. load the stom – therefore less proper.

Refrigerants have been employed. Nitre is chief of these but it has been observed sometimes to increase the Sym. of fever. it also loads stom. should therefore, if admin. be given in very small quant. & much diluted. Vegetable acids, acidulated drink useful for this indication Inhaling steams of warm water in many cases gives great relief, it relaxes the inflamed vessels, & softens the viscid exhalation into lungs – But some Pt. cannot bear it. When it can be borne without inconvenience it should be employed. It is much preferable to external foment. to trunk of body &c. have also been recommended. & if cautiously employed, so as not to create too much heat, nor to interfere with blistering may be useful.

Diaphoretics of the mildest kind may be of great service in lessening general fev. Neut. Salt, or Spirit.

mender. The strongest that should be used. This last is the most convenient. May bring out a mild gentle sweat, &c, we may keep up for a considerable time, & thus very much relieve the gener. fev. Strong heating sudorif. seem to be employed. – Perhaps too diluents more to be trusted to. They should never be neglected; & we may combine refrigerants along with them, as little nitre, vegetable acid, or chrystals of Tart. dissolved in the drink.

When the fever & pain are almost gone, or when together with remission of febrile Sym. there is much cough with little expect. an opiate may be admenistered, but not in large dos. While febrile Sym. remain high Op. should never be given. It may in such circum. give an appearance of relief wh. is deceitful, & while Phys. thinks he is curing his P. he may be only hastening his death. Often when expector. is considerable, if the cough be very troublesome, the temporary stopping of expectoration by opiate tends to make it go on better afterwards.

If the ves vita be very much sunk, so that P. has not strength to expectorate, we

must give a little wine to support vis vitæ, this is sometimes necessary in the end of the disease.

We should pay particular attention to the temperature of the P's body. Too much cold would be hurtful – too much heat much more so. A temperature not above 60°, nor perhaps under 50° the best. Many P. do very well in a much greater degree of cold; but too much cold might increase infl.

The Posture of P. should also be attended to. If possible P. should sit up. When this he cannot do from debility, should be propped up in bed. The respiration most easy in erect post. & every expedient should be employed to render the resp. as easy as possible.

Food should be the lightest possible, as an. food, mildest veget. food, if P. hungry, as sometimes happens Jamada, acido-dulces fruits of all kinds – No cordial, unless debility in end of disease render cord. absolutely necessary, & then

very sparingly. Every attention should be given to avoid irritation of every kind. — Generally the Lenit & water gruel would cure, from the beginning, without any other application, but every other expedient that tends to facilitate cure should be employed.

Altho the mode of cure in Pn. is perfectly understood, yet no other disease is greater nicety required for applying the different remedies. — Thus in Bleeding. Sometimes Sym. of Gen. feb. & pain continue after the signs of resolution, chiefly expectoration have come on. In this case it is difficult to say when our indication should regard the Gener. feb, or the resolution begun. If the P. be relieved, tho the gen. feb has not yielded, if the pulse be become softer & the pain less acute, we may trust to the resolution by expectoration. But when sputum along with symp. of increasing inflm. shooting pain, flushed face &c in this case it seems safest to try a small bleeding. Yet in other case should the P. die, we have the painful suspicion, that by trusting in the one case to expect. we have allowed P. to die of Gen. feb. & in the other, that by attending

to the general plan, we have checked the expectoration, wd might have proved salutary. Great attention & caution are therefore necessary in judging from the whole circumstances of the case. —

Peritonitis — This rarely of ever occurs as a primary disease — sometimes it is symp. as in Puerper. fever — when prem. disease the plan of cure the same as in Pneumonia.

Gastritis

Fever — S. oppression, anxiety, uneasiness — violent acute pain about pit of stom. This pain aggravated by the slightest compression, wd, also produces vomit. Gast. uncommon here in its primary acute form. Perman. acute pain wd. frequent vomit have however indicated the existence of this disease, tho it has not been noticed as Gast. — Pulse is frequent, sometimes hard, quick, but always small. Sometimes the disease connected with great debility & tendency to syncope — Sometimes there is violent acute burning

pain, increased by smallest pressure, frequent nausea & vomit. from spasmod. affect. In Gastr. these Sympt. appear at the beginning, so often do also vertigo, coldness, sup. of Urine, blindness, & sudden death, before the infl. could be supposed to have run either to Gr or to suppur.

Sudden death produced by many substances taken into stom. as some sorts of poisons Laurel water, this in small quant. harmless, but in pretty large quant. has been immediately fatal. Cold water in large quant. taken suddenly into stom. when person warm has had same effect - tho many people suffer no inconvenience from this. Distilled spirits in large quant. have same effect. Tobacco Juice also. Even the milk of a nurse may be so much vitiated by violent passions as to bring on vomiting, purging, or even convulsions on the child.

Yet strong effects may be produced on stom. without any general bad consequence. As by dyspepsia, spasm of stom in cramp may occur very often with little or no danger. Yet other species of spasmod. affection of stom

may be extremely dangerous. as that from repelled Gout. In most cases of misplaced Gout the stom. is affected chiefly with weakness. But in some cases a strong spasm is induced wd, may be fatal in a few minutes. — Similar to these sudden bad effects, is the sudden good effect of some cordials, as rum, in great debility. — External violence, as blow on stom. has same bad & sudden effect — deprive person of strength for hours. Wind of cannon ball passing near stom. has induced sudden death. — From these circumstances we conclude that there is a very great connection between state of stom. & of the principle of life. Gener. sym. most various, from the universal sympt. between stom. & other parts.

Termin. of Gastritis — In mild case complete resolution may be obtained. This will be indicated by easiness of pain, & vomit. & rise of Gen. fever. But in such cases we must be on our guard against the danger of the sympt. returning.

Violent Gastr. runs very speedily to Gr. so that death may happen from Gr. in 12 hours.

 This termin. may always be looked for in violent Gast. The symp. on the pain suddenly subsiding, coldness of the Extrem. the pulse sinking, a cadaverous look while the anxiety continues. Yet from these symp. we must not conclude that G. has already begun, & therefore remit our endeav. If the pain continue we may judge that G. not yet formed. Yet in great weakness or Lypothe P. may not be sensible to the pain tho it be present. Sometimes a slight Gastr. may run to G. tho no violent symp. present.

Gastr. may also run to suppur. if it continue long as from one to two weeks. This indeed is an uncommon length, tho it may be protracted to long d. remissions & exacerb. Suppur. may be judged of from remiss. of fever, dimin. of pain. anxiety continuing, w. sense of weight & oppression about stom. then the fever changes into hectic. In this state P. may linger for weeks or months, may they or may recover completely. The abscess may burst into stom. & be discharged. The stom may adhere to peritoneum & abscess may make its way outwards. Young woman had such an

ulcer for 23 years, old woman had one for 12 years, thro wd some of the food always passed - P. felt no great inconvenience from it. (Swieten)

Another termin. is Schirrus, chiefly about pylorus, there is formed a painful lingering fatal disease. in wd, P. may live for years - tumor may be known by vomit. beginning from 2 to 6 hours after taking food, P. continually costive - becoming emaciated from want of nourishment, so that you may feel the tumor - sometimes such tumors go on to cancer, but they are generally fatal without running to suppur.

Causes - We know nothing of any predisposition to Gast. except that that is formed by having had the disease. The occas. causes may be all acids taken into stom. as acids, alkalis, poisons of various kinds, corros. subl. One P. who took large dose of vitr. acid, wd. intention to kill herself, vomited a part of the esoph. P. lived a fortnight after taking the draught. Another P. got by mistake instead of Glaub. sal. Nitre; another got salt of

tartar, instead of sol. Tart. both had Gastr. Anemone med. have tendency to gen. Gastr. Turbith min. Blue vitriol, that is vitriol of copper has some effect. – to have drastic purges Jallap may gen hypocath. w. very vol. gum, & syrup of Buck. Helleborus, Gamboge, long draughts of cold liquor when body warm, particularly acid liquor, as sour small beer. or sour wine – Hard dry aniced smoked, salted food when stom weak especially from previous infl. may produce Gast. Therefore those who have had Gast. should live for long time on the lightest food. Even overdistension of stom. from too much food or drink – a spasm in. then cases is said to be formed on each end of stom, & from ferment. the pressure on stom. has produced infl. has given been said to burst stom. it is certain that death has been often produced by overdistension. Stom. but whether in consequence of infl. is not certain.

Gast. may be produced by acrid humor getting into stom.
from intest. as acrid bile – These however do not
often produce insf. tho they do hiccup nausea, &c
the stom. is sheathed against them by the mucus it
contains, hence many very acrid substances do not
prod. insf. as some of the aroms. we take with
our food – they only give a stim. – All external
violence, as blows, contusions, may produce Gastr.
Sometimes also insf. of stom is from metast. of other
insf. – It may be communicated from the liver
which is applied to stom. it may be propagated
from the bowels – It may occur by metast. of Gast.
insf. from this cause is a real, tho a rare occur-
rence. Erysipelas also to pass into Gastr.
this is surely very rare – We meet with symptom.
Gast. in S. Pox – great vomitability of stom. nausea,
vomit. pain increased on pressure, combined w.
insf. fever, an all marks of insf. Generally this
insf. goes off on eruption of pust. but may
continue & prove fatal also. Similar Gastr.

in the plague, & a low degree of it may be observed in the bad fever of this country — perhaps it is the kind to & on some of the worst species of Typhus that renders the disease so speedily fatal.

Plan of Cure — In Gastritis Phlegmonodea or proper idiopath. Gast. the cure is the same as in the Phlegmatica. General bleeding, large, frequently repeated without regard to the Typhod. nature of the fever. Altho the extremities cold, pulse small, great debility we must still bleed if pain continue. In short whatever Symp. occur we must bleed so long as we have evidence that the action impl. continues.

After one or two bleedings a Blister may be applied to stom. this relieves many affections of stom, as hiccup. nausea, vomit. Therefore it coincides with the effect we wish to produce by bleeding. Fomentations may be applied to body or to the limbs with a view to the General fever. Frequent Glysters, to evacuate, to relax, & to dilute. for P. cannot swallow drink to dilute, the morness

of colon to stom. may also make glister act as foment. to stom. In pure Gastr. it is impossible to give med. into stom. But in Gastr. from poisons we may endeavor to throw in various substr. either to sheath stom against acrim. of poison, as milk, fat broths, oil, or we may give specific correctors thus, when poison is acid may give alkali, & vice versa. And if the spont. vomit. not sufficient to bring off the poison may give emetic, as Ipecac. The drink should be of the mildest kind, & always lepid - milk & water &c & in very small quant. at time, a spoonful at a time, untill we find it retained, then a little more freely. Opiat in form of Glyst. may have good effect in allaying irritation. The Antiseph. regim. must be most rigidly adhered to, especially in regard to food & drink, for a long time after infl. subdued. P. must also be most carefully preserved from impression of cold - especially from cold or damp feet.

Sometimes there is Erythemat. infl. of Stom. indicated by dull pain, redness of fauces, vomiting &c. This does not require so copious bleeding as the other, blisters most effect. acescent drink, butter milk, & when the infl. subdued Bark —

Enteritis

It is not always easy to distinguish this disease. There may be pungent pain, nausea, vomit. &c & these may subsist for days or even weeks while yet no infl. present. But in these cases of colic, there is not pyrexia — from the degree of fever we must therefore judge of the presence of infl. Unless however we be sure that the colic is not inflamat. we should treat it as if it were infl. The pain being increased on pressure is almost a sure sign of infl. The fever is generally Typh. sometimes however there is strong full pulse, & frequent, sometimes thready — the head is generally clear. The seat of the pain is generally about navel.

The pain is acute, twisting, shooting according to the motion of the bowels. The pain never ceases, tho it may admit exacerb. & remissions. While the pain of cholic is often gone entirely & returns again. Generally there is nausea, vomiting, first bilious then black fetid, stercoraceous. Glysters may be discharged thro mouth, from inverted motion of intest. Costiveness both produces cholic, & is produced by it. Hiccup, flatulence. Some portions of bowels are contracted, other parts distended. Sometimes great tension of the abdomen. Tho this is not a peculiar sym. of intsl. Sometimes the sphincter is completely constricted. May be strangulation, or intus susception. Strangury also may occur.

Intestines admits all the terminations of Gastr. It may be resolved, & that spontaneously. But this should never be trusted to. If not speedily remov'd it quickly turns to G. P. may die in few hours after. G. may occur 10 or 12 hours after invasion

G. known as in Gast. by scanty of grain, weakness of pulse, weakness & change of voice. change of count. retention of stools, swelling of abdom. from effusion. Head remains clear to the last. – G. & sudden death have arisen, when from slightness of attack no suspt. was supposed present. – When it ends in disp. recovery is very precarious – Generally the lun carries off P. – Sequelæ also inevitable – tombers disposition left by Enter. & frequent attacks. will have at last ended in Sarcina, or G. tombers it may be known when stretches is, the gen- ally end.

Predisposing causes – Enter. disease of declining life from costiveness common at that period. in Rheum. people, whose solids are firm, who live fully or perhaps intemperately especially in regard to strong drink – But young people may have it. rarely however to children – V. G. one P. of 44.

The cholera common in child. Enter. hardly ever.

But occasional causes chiefly produce disease, & in people of any temperament or age. These are acrid ingesta, poisons of any kind, corros. sub. drastic purges, Hellebor Jalap &c especially if they fail in removing the obstruction for which they are applied. Squill in too large quant. has given Enter. Even the common merc. pill. These generally give gripes & purge in large quant. If P. has been long costiv any cath. may give infl. even Glaub. salts. Hence in P. long cost. should give Glister along w. cath. — May be brought on by intemperance - rarely a single act of intemper. brings Enter. unless in P. who have predisposition from having had disease. In this case a very small degree of excess may bring it back — P. had disease return & prove fatal in 18 hours from taking cock broth, together w. fragment of the cock. corruption of aliment in consequence of bad digest. or quant. of corrupted bile as in cholera. Spasmod. cholic of violent may induce Enter. But chiefly the

cholica stercoracea, from obstructed feces that produces it. Hence it is apt to supervene on cholic, or gripes & costiveness. Scirrus tumor, or tumors of any kind pressing on the intestines may bring it on. Procures hernia also — hernia may exist for greater part of life without giving Ent. but whenever it is obstructed Enterites certainly follows, unless be speedily removed. Dysent. cause of Enter. Ofs itself a species of infl. of bowels; & in violent case proper Enter. is often brought on. Said to have been produced by Metast. of Erysip. More frequently from revulsion of Gout — at least from this violent cost. has arisen, & Vol. cost has great tend. to give Enter. Said to have been also from Metast. of Rheum. this very unlikely, & surely very unfrequent. Cold applied especially to feet & legs — this in some constit. gives cholic, gripes, diar. or cost. & in highest degree may prod. infl.

Plan of cure — as in other Infl. To mitigate.

gener. fev. relieve disp. affect. The great object is to prevent g. ner. or sup. For this purpose we must first remove the occasional cause, when that can be done, or obviate costiveness. Gene. bleeding as early as possible, even before infl. begun, when we know it only to be threatened, bleeding the best preventt. Should be large from 12 to 18 oz. according to circumst. If one bleeding does not relieve pain, heat, vomit, it must be repeated soon, notwithstanding the weak sunk state of P. Bleeding sometimes raises pulse in this disease; & is employed w. advant. 2 or 3 times a day if the symp. require it. Even the pow. weakness of P. bleeding should seem danger. it is by no means so dangerous as the disease left to itself, w. in such cases will always be fatal. — Cupping the abd. this may be of some use, but it is prob. compared to Blistering, which therefore it

should never be allowed to supersede. In spasm. chol. blister. has relieved spasm. & med. cath. act when before it had failed. has similar effect in lint. Fomentations to trunk of body may be useful. W. Bath best method of applying it when can be had. If cannot be had, a warm flannel wrung out of hot water may be used (Ed. Med. Trans V.3.) Glysters emolient, & only they are relaxing & may tend to remove spasm. should be large & frequently repeated. Sometimes sharpen glyst. ℥ss. senna boiled in water ℔i or ℔ss. for a quarter of an hour, & thrown up. or we may add a little common salt, or soap bd. or Glyst. may be made both com. salt, or Glaub. sal ℥i — Tobacco has been used as glyster but dangerous from its general violent effect. If Tob. used must not exceed ℥ss. boiled in ℔i water. Practitioner by mistaking the mark ordered ℥ij instead of ℥ij & R died in a hour.

Warm water in such a quantity as fills the colon
as good a glist. as any. Some ℞ can receive 6
or 7 ℔. 4 or 5 may be injected. This acts as
foment. & relax. & the injection may be repeated
2 or 3 times in a day. — Cath. by mouth
may be used with glist. Then at first must be
of mildest kind, & such as operate gently.
Sprom salt. Glaub. S. Sol. Tart. Sod. Phos. Castor
oil ℥ss. with little of some aper. Tinct. laxat. — chrys
of Tart. from ℥ss to ℥iij in doses of ℥i or ℥ss
at a time, & frequently repeated. There may be tham
up at first, but generally then will soon
stay & operate after a few doses. All slow
cath. as aloe, rhub. &c to be avoided. Senna
id. tamar. infusion of, one of best cath. that can
be given, if it can be made to stay on stom,
& taken in small repeated doses. More
drastic purges than these given, as Jalap,
Gamboge, Calom. 5 to 10 gr. cal. may be taken

in pills, & repeated every 2, 3 or 4 hours till it operate — This easily retained on stom. or it may be combined with Jal. or ed. Gamb. Comp. powd. of Jal. may be used — tho most of this may be rejected, some of it may get down & operate. But when the vomitation is great these drastic purges may increase infl. & are therefore not to be ventured on. When the naus. & vomit. great should try to settle stom. by efferv. draughts frequently repeated. Op. also but cautiously, small Op. pill may be given now & then. or Op. in form of Glist. In this disease Diet must not be mentioned as P. can take none — but almost corn should be taken to keep P. on the mildest diet for consid. time after infl. has ceased. Tenderness in abst. cost. sudden affusion of cold water on lower extremities has produced a stool after all other attempts had failed.

When evacuation by blood produced the disease is for the most part over — sometimes however this will not be the case. —

Hepatitis. —

The dry cough & difficulty of breathing which often accompt. it, from spreading of infl. to lungs, or from the descent of the diaph. being impeded, & giving irritation. Vomit. & Purgatives. from diaph. & stom. being affected, or even from sympathy with inflamed neighboring part. It. most common in E. Ind. pretty frequent in W. Ind. but uncommon here. It is divided into Acute & Chronic. The first species very rare in Britain, or even in Europe. The latter occurs more frequently, than is supposed in this country. As on dissections often find marks of previous infl. as adhesions, abscesses, scirrhus, which no infl. had been supposed. It. was not till lately much attended to. Boer. & V. Sw. full of bad theory on the subject. Our knowledge of it chiefly from

our communication with Indost. Many of our country-
men bring back the remains of it. some of them have
fresh attacks of it. The disease sometimes in the upper,
sometimes in the under side of liver. In both case the
diaph. is affected often, by spreading of infl. & hence
the same symptt. In acute H. it is chiefly the memb.
that is affected, but infl. also spreads to subst. of
liver, & thus the acute & chron. may be combined. Infl.
also may spread to gall ducts, or tumor may compress
them & produce jaundice. But the yellow color is
generally accomp. this disease is not always from ob-
struction of bile, this is cord. from bilious disor. it
is sometimes found connected with it, as it is with some
fevers in which there is morbid state of bilious discharge.
Sometimes disease begins in the violent acute form, & gra-
dually settles into chronic H. & vice versa.

The feo. of H. sometimes very violent, sudden
& infl. id. great heat, frequency & strength of pulse.
The pain is sometimes dull, sometimes sharp, chiefly
on the right side, & shooting often to the shoulder.
This last sym. generally a sure mark of H. The
pain is increased on pressure, on inspiration,

for coughing. Generally the cough is dry. Often there is hiccup, vomiting, these last sym. from spread. of inflm. to Diaph. & stom. The cough from its spreading to Lungs. The Diaphr. Lungs, & pleura have been found adhering; & aperture from lower thro Diaph. to Lungs, from wh. purulent matter has been discharged by spitting.

Jaundice sometimes accomp. Hl. or Bilious vom. or Rel. Diar. & this last is sometimes salutary. The great discharge of bile may either be the effect of Hl. or it may proceed from same cause wh. induces Hl. Urine sometimes high colored, & sometimes also it is found Tempd.

Repat. admits of resolution, even spontan. but this last seems to be relied on. Sometimes the resolution of Hl. is connected with copious sweat, or wh. Hemorhages, as Epistax, or Hemor. or wh. with bilious Diar. or with copious discharge of urine with thick sediment. Hl. has been

said to disappear on the appearance of extern. & resp.
Sometimes Pl. terminate in suppur. The tumor
may be very large. Sometimes the abscess bursts out-
wardly spontaneously, or has been opened & P. recovered.
4 lb pus has been taken out at once, wd. be the
bulk of an ordinary liver. – Sometimes the liver
with the purulent matter has weighed from 10 to
14 lb. When abscess points out, we may in-
fer that the liver adheres to the pleura & com-
mon teguments, on wh. the safety of the operation
depends, & open the abscess. When the abscess
bursts into abdomen the event is generally soon
fatal. From adhesions pus may get into the
colon, or stom. or other part of intestine. Or it
may be discharged into intest. thro the bili-
ary duct. Or it may get into the thorax.
Resp. sometimes terminate in scirrhus. & in
this state P. may live for months or even
years without much inconvenience. P. have
lived 20 years wd. liver much scirrhed &

indurated. But generally this termination leads to jaundice, suppuration, chronic hep. w.h at last terminates fatally. — H. sometimes goes on to produce dropsy sometimes tho rarely it terminates in G.

Causes. —— It is endemic in the torrid zone most probably from the heat of the climate. Long continued hot weather in Europe has sometimes given a predisposition to it. Many diseases in which the liver is affected are connected w.h heat. Cholera, & bilious fevers are generally found in hot hot weather. Inter. & Remit. in W.C. are connected with H. The liver generally affected, or at least the biliary system, in these diseases & they are connected with hot weather — English dogs in Ind. subject to H. the operation of opening empost. has been performed on them. In W.C. It is sometimes brought on by cold, as by exposure to night cold & dews after heat of the day. Violent exercise, or violent passions as anger, hunger has often given cholera

Jaundice. A connection generally supposed between
liver & biliary system — hence the word Cholera.
Fevers of different kinds have brought on H. just
as Pneum. has been induced by fev. of inf. kind
External violence has induced H. Fracture of the
skull has been said to give H. This may give vomit.
& violent stom. affection. Hence vomit. may be bilious
as all very violent vomit. generally becomes. What-
ever violently affects biliary system may induce
H. But very few cases of H. can be referred to
this cause — chron. H. may bring on the acute.
Tubercles, skatoms, hard gritty concretions w.h are some-
times formed in the liver may prod. H. One liver
indurated & enlarged to size of 18½ lb Alexander Jones.

Plan of Cure — is nearly the same as in other
Phlegmasiæ — When there is much fev. & strong inf.
General bleeding is necessary. When fever continues
w.h pain, hiccup, cough, dyspnœa, anxiety, bleeding
is to be repeated largely while these sym. remain
even in circumstances w.h otherwise unfavorable
to bleeding, as when H. combined w.h Inter. or Remit.

But in these circumstances we must be more cautious of drawing more blood than necessary, than when no such counter indication. When general bleeding doubtful topical may be employed – but this is not near so efficacious as blisters, which it should therefore never superseede. Fomentations may be applied to trunk of body. Emolient laxat. relaxing glyst. must be used. Mild cooling cathart. as Sol. Tart & Tamar. in Senna – these cooling laxat frequently given to keep belly open better than giving strong cathart. Refrigerants, acids veget. Neut. salts, saline draughts may be useful. & should be frequently administered. — But the remedy chiefly to be relied on, yet not so as to superseed those mentioned is Mercury – It may be either rubbed or swallowed. ℥j or ℥jj merc. ointt. may be rubbed once or twice a day – may be rubbed on abdom. tho the place seems of little consequence. It may also be taken in Pill – some give it in calomel,

But there seems to be no good reason to give it in a form more acrid than its natural. If however cal. be given we may begin wt. 2gr twice a day, & then increase it to 3gr.

The appl. of Merc. both internal & external should be pushed till the mouth be slightly affected, not however so bring on salivation - & this affection should be kept up from 10 to 20 days according to the symp. In Chron. Rh. it must be kept up much longer, five or six weeks, & then we may intermit to allow Pt. to recover strength, & begin the same course anew.

This course may be begun very soon after the invasion - as soon as by a bleeding or two we have moderated the violence of infl. we may begin it even the first day - Merc. is not incongruous with the antiph. regimen. Its specific effect may tend to check the progress of infl. after we have broken the fever a little by antiphlog.

when judiciously applied Merc. has great effect
improperly administered may do harm. It may
therefore in all violent cases be proper to
moder. the violent Symp. before we begin Merc.
Merc. has also been tried in Dysent. in
Pneum. in Cynanche but with very doubt-
ful effect.

Bitters have also been employed, as
camom. infused w. alk. in the proportion
of ℥ij decoc. cam. to ℥ss alk. — This must
be a very nauseous remedy — tho perhaps it
may be of some use if stomach disordered

If Pust. seem to sup. & abscess forms
outward it should be opened. In this case
we may be pretty sure that adhesions have
formed between peri. & common tegum. &
this renders the operation safe. Some P.
have undergone it oftener than once, & had
lb 4 purulent matter discharged at once.

Chronic Pl. is often very obscure, may be far advanced, may had all probability of cure before P. aware of the disease – Many anomalous sym. accompany it. Various intern. & remit. fevers leave tend. to C. Pl. or such a state of liver as soons becomes C. Pl. These fev. leave debility, bad spirits, bad app. &c.

First symp. of C. Pl. generally dyspeptic – Uneasiness of stom. flatul. & eructations chiefly acid tho sometimes putrid. fullness, & oppression of stom. loss of app. from remora of aliment, the digestion being impaired. Sometimes a craving of appetite – sometimes change of countenance, dark pale, or leaden color – a degree of general swelling, or tendency to Leucophlegmasia. Eyes dull heavy, albugenea yellowish, giving a lurid appearance to countenance. Great uneasiness of abdom. superiores, & pain, chiefly in right Hypochondrium, pain increased on pressure – pain shoots to back, & from that to shoulder. There is languor lassitude, & even drowsiness, but the sleep is bad, being disturbed by frightful dreams.

P. feels great depression of spirits, & a sense of her own danger. The body is at first cost. then vari-ous, at last a const. coll. diar. comes on, the stools being small, thin, fetid. The abdom. becomes swelled, tense, accompanied sometimes w/. ascites. Pulse but little changed till the disease far advanced in some cases. in the last stage it becomes frequent, irregular, weak – The tongue becomes white, foul, dry – The gums appear peculiarly hard, so that it is very diffi-cult to affect the mouth w/. merc. The skin is dry & hard, the urine scanty & high colored – The breathing is affected from the beginn. & grows gradually worse w/. hard dry cough often, – Sometimes pain in shoulder from the beginning – even when no pain felt in side pain may be felt on pressing shoulder, when no other pain perceived. Sometimes pain wandering shoulder,

Sometimes distinct hardness of the liver may be felt. P. often cannot lie easily on either side, must lie on her back w/. her shoulders a little raised. Sometimes there is pain in thorax w/. urgent dyspnoea, hiccup, vomit. - sometimes jaundice.

The duration of these sym. various, P. may be cut off in 5 or 6 weeks - he may linger for years. These sym. sometimes connected w/. spas. mod. asthma, that is w/. sudden fits of dyspn. At last suppurs. hectic, diar. come on. Sometimes P. deformed by pushing out of breast.

In the cure of this disease bleeding must be cautiously & sparingly employed, only used when sym. of infl. pretty high. Blisters also but little to be relied on. Mercury as before recommended the chief, almost the only remedy. To this astring. & tonics have been added. Camom. columbo root, Per. Bark. Some have recommended general stimulating diet, a good deal of anim. food highly seasoned, & the

pretty free use of Madeira wine. Whatever advantage may be derived from this regimen it is certain that those are least subject to it. who use least of this regimen. The natives of Hindost. are much less subject to liver complaints than the Europeans who live much more luxuriously than the natives.

It is of great use to remove P. from climate of India - getting to sea has done great good. P. has been almost well by the time they got to cape of good hope - When this cannot be done P. must be removed to cooler air. as from the sea coast, to the high grounds up the country - But when the disease is far gone health is hardly ever recovered.

Splenitis

Hardly ever occurs - same treatment as the internal Phlegmasia

Nephritis

Difficult to distinguish between Nephritis & Nephralgia calculosa. Yet it is of great consequence to distinguish them as the method of treatment is different. Nephrit. is rare disease. Nephralg. common. for one case of Nephrit. we may meet with 50 or 100 of Nephralg. The only certain diagnostic is the presence of pyuria which is not found in Nephralg. We may judge also from the const. of the P. Nephralg. is chiefly the disease of old infirm gouty people - or of people who inherit predisp. to gout or stone.

When only one kidney is affected, the other may lie so also from sympt. as in Lyes & the urine as in other nephr. is red, but often also mixed with blood - this is particularly the case when the Nephr. proceeds from calculi. Vomit. this from sympt. between kidney & stone. often the vomita-

tion of a calc. in kidney will cause nausea, when but little pain in kidney – hence the nausea w. P. of Nephralg. habit often feel in the morning. There is often stiffness of the leg & thigh – this arises from the nerves passing thro the Psoas muscle afterwards joining the crural nerve, being compress in their passage. – Pain & retraction of right testicle depends on the same principle. All these symp except Pyrexia may proceed from Nephralgia calcul.

Nephritis may also be confounded w. some Rheum. affections – but here the diagnost. is more easy. There may be violent pain in the psoas resembling Nephr. in its seat & acuteness, in its sudden invasion also; but besides that there is no pyrex. in these cases, the motion is also impeded on such affections, which does not happen either in Nephr. or Nephral.

We may also distinguish these affections by knowing the circumstances from w. they proceeded, or by finding other Rheum. affections in the body. There is hardly ever any thing like nausea connected with them. – Nephr. may also be confounded with cholic, – this also may be distinguished by knowing the previous circumst. If body can bend easily, it is not Rheum. If pain shoot along the ureters to testicle & thigh it is not cholic. frequent call to make water also marks the affection of the Kidney – sometimes also a total suppression of urine, even from affection of one kidney.

Nephr. admits of resolution, even of spontan. resol. & early. If disease lasts many days there is great chance of a bad termination. If protracted beyond 7th day, bad.

the sooner it stops the better – the resolution is sometimes connected w. discharge of thick urine – sometimes with sweat, hemorh. or diar. These not very common – generally resolution indicated first by a remission & then a gradual easing of the pain.

Admits also of suppur. this indicated by violent disease, long continued, remission of fever without easing of pain, throbbing of the part, rigor, wasting of body & hectic. In these cases kidney may be totally destroyed, or become a bag of pus, & of a monstrous size 14 lb weight of pus has been found in kidney – sometimes the wasting of the kidney has been observed when there was no suspicion of nephrit.

Nephr. may also terminate in ∫. or in scirrus. Lameness has proceeded from scirrus of kidney. Sometimes hard stony concretions form in kidney especially in gouty people. 1 kidney of this kind weighed 40 lb – filled a bucket.

Predisposition left to Nephr. by having had it. But any other predisp. not to be relied on. Seco instances occur of idiopath. nephr. often however the urinary passages are the first parts of the body that fail. This probably arises from the use of acrid substances as high seasonings, spirituous liquors &c &c. chiefly keep off by exercise, occasions and the urin. system before the rest. Many instances of particular parts of the body failing before others. In some people the nervous syst. first fails, as is evident from the tremors that come on while use other respects body pretty sound — In others the stomach, in others the head &c — But very frequently the urinary system, even without Gonor. which certainly tends to make it fail. — Partly perhaps from this circumstance, a predispos. is formed by Gout to Nephr. in old gouty P. Gouty P. generally plethor. they live freely & take little exercise, they are indolent. In Gout also there is a peculiar morbid acidity in

stomach &c. Gouty P. often complain of dyspep. & chiefly of morbid acidity. This acidity is nearly connected with both Gout & calculous concretions. & Nephral. calc. tends to induce nephritis from the irritation given by the calculous or chrystals that form in the kidney. The posture to which P. much affected w. Gout are often long confined also favour nephral. lying on back, with pelvis rather sunk down in bed, so that bladder is high as the kidney - urine cannot easily run off into bladder in this posture - hence chrystals & calculi formed. Same happens in bad fracture or any other accident that confines P. long to this posture. The heat in this posture also favorable to production of nephr. Both nephraly. & nephral. complaints have also been hered. families have been subject to them. Some, especially Gouty P. have kidney very tender so that they cannot bear rough motion in walking, riding &c without bringing on irritation of kidney. External violence, has given Nephr.

Cure — The general principles of other Phleg. Inflam. apply entirely to this. Bleeding necessary, as early as possible, & large & frequently repeated according to violence of Symp. — Often however the disease appears in old feeble gouty P. who bear bleeding very ill. When this contraindication present, must be careful of venturing far in bleeding — small bleeding at first to see how P. bears it & what effect it produces. Very little bleeding is necessary in such P.

Blisters — These have been supposed dangerous from the irritation they give to the kidney — yet they certainly give considerable relief — indeed their stim. effect is chiefly on the bladder — they are therefore not to be omitted. Great care must be taken to evacuate the colon & bowels, by mild laxat. Glyst. Mild laxat. by mouth also must be given, as manna, castor, senna, lenit. electuary — But saline purges improper as they stimulate too much the urinary

system. Great relief may be obtained from the w. b. or fomentations to limbs, or to trunk of body. These determine to the surface, & from the kidney. On the contrary cold is to be avoided because that determines from the surface to the kidney. This apparent in coming from warm room into cold air, when perspiration checked there will very soon be call to make water, which there was not while perspiration was kept up. Heat of bath may be about 80° or few degrees more.

Diluent drinks necessary, composed of any mild mucilaginous matters as whey, milk & water, linseed tea, barley water, water in. gum. arab. dissolved in it. The effect of these is apparent from it happens in gon. vesicul. when such mucilaginous drink lessens the ardor urinæ, & hence tends to allay irrit. Acido-dulces fruits may be useful. But in some constitutions these determine too much to kidney & may be rather hurtful.

In pure idiop. Nephr. Opiates of doubtful effect.

But in Nephralgia Calculosa — of which we treat in this place tho not a Phlegmasia, they are of great use.

Calculus connected wth. acidity. any thing, as clot of blood, remaining in Kidney may be a nucleus to it. When calc. begins to fall from Kidney there is brought over fit of the gravel severe, in proportion to size of stone. The urethra not being all of equal diam. the stone sticks hence spasm formed w^h. prevents farther descent of it. The pain in this case is often intolerable, wth. sickness, nausea, vomit especially when stomach is empty in the morning. Pain shoots to the thigh, to the testicle wth. retraction of testicle numbness of limb. Often attended wth. Symp. cholic, so that the whole may be mistaken for fit of cholic. But this mistake is of the less consequence, as the remedies in both cases are the same. When violent fit of chol. in plethoric habit, it will be necessary to bleed to prevent inf^n. Bleeding is also a powerful antispasmod.

on some principle must use cooling Glysters - cooling purges as oleum ricini, cassia, manna, lent. Electr. - warm bath also as a powerful relaxant - but above all opiate either in full doze or frequent small dozes. By these means the descent of the stone is facilitated, & relief obtained often in very short time.

When stone gets into bladder - of which we judge by the ceasing of the pain, the danger is not over. It may remain there & increase. In order to bring it off P. must drink plentifully of diluent drinks. lest as the irritation of bladder causes frequent call to make water, & so prevents the water from flowing off in great quant. or in full stream, he must make P. drink largely of diluent drink. Gin & water good as heavy diuretic, at bed time, then give him full doze of Opium 30 or 40 drops Laud. of Op. to make him retain water. When he awakens he will be able to make water

in full stream, which he should do bending forward so that the course of the urethra may be as much as possible in a direct line from the ischiat. vessels. This may be repeated many days successively. If after all, the stone does not come off recourse must be had to those means that prevent its increase. - by avoiding acids, & taking such medicines as correct acidity. - The calculous Diath. corrected by various absorbents, & by alk. But when large masses already formed very little can be done by any known remedy towards its solution. The use of absorb. & alk. may do much to prevent the bad consequences of stone. Lime water may be used. & may be taken in very large quant. But the most convenient form of these med. is the Aq. Ker. Mesph. This produces no general bad effect on const. which often follows from other medicines of this class. Many of them bring on general bad health & something like a state of general scurvy. A. A. M. free from this - may be taken in doses of ℥iij or ℥iiij two or three times a day. But sometimes it purges - when it does this effect lessen quant ℥ij.

If it does not purge P. may take a greater quant. than
℞ IV 3ii — Diet must be mild, such as gives good nour-
ishment, & is of easy digestion — not acescent avoid fer-
mented liquor, raw vegt. &c No high seasoned food, from
stimulus thus given to the urin. syst. nor strong liquor.
body must be kept open. Violent exercise must be avoided
moderate exercise proper — If, as sometimes happens, not-
withstanding all these precautions, fit returns — and
very slight general causes as cold &c may bring on
violent fit, w^d pyrexia, & degree of infl. we must treat
it according to the degree of infl. after the usual
more healthy Phlegm. Bleeding according to circum-
stances, abundance of mild mucilaginous drink —
& above all opiates, in full doses — keep body
open by lax. Glyst. & laxat. by mouth — warm
bath — fomentation. — These means generally remove
the fit in a few days — There is no radical
cure in such cases but the operation of
Lithot.

Rheumatism

Of this there are two species the acute & the chronic, distinguished by the Pyrex. in attends ac. R. but not C. R. & by this also that C. R. agrees better with heat than the other.

Rheum. generally from cold – but we cannot say that it is always from cold – external violence will give very much the same symp. R. was not till lately much known, or at least was not distinguished from Gout. Sydenh. gives first good description of it – after him Boerhaave who had very violent attack of it describes it. R. distinguished from Gout by the cause. Seldom we can assign any general cause for Gout, tho sometimes a fit of G. brought on by cold, wet, external violence – violent exercise. R. much more frequently from cold. Gout too attacks, at least at first, the small joints chiefly the ball of great toe – Rho. rather attacks large joints knees, hips, shoulders elbows. Often it is very general, & attacks almost

every joint of body - fingers have been quite distorted by it. Gout less more from hered. disposition.

The Pyret. of a. R. alway infl. It may preced. the harm, or follow it, or both may come on at once. Feb. may be very violent, pulse to 130 - but it does not tend to debility. R. has great tendency to spread. Lig. of joints, tendons, & muscles affected by it. & the harm spreads along the course of muscles. Often begins in one joint & leaves that & goes to some other perhaps very distant - or attacks more joints than one, & perhaps returns again to its original seat. Often occurs without spreading, as in Lumbago, but this also may spread & shift. Same id. Sciatica R. These two may continue very long without shifting. Often the Rh. infl. very general, so that can scarcely touch P. without giving them pain.

The common course of disease is, when Pyr. severe it will continue two or three weeks, then subside - Often not so long, 1 week, or 30 or 40 days.

But often when the fev. is gone, & the general health good the loc. infl. will continue severe - may shift its place, or continue in same place for months. The disease may also have a different course. Many begin in the chronic form, & afterwards change to the acute. Many P. have no Pyr. with Rheum. The loc. infl. may be severe & pretty lasting while yet no fev. This resembles what happens in Gout. The first attack of G. often wt Pyr. yet it often occurs when no pyrex. present.

Rheum. does not run course of other Poly. never goes to G. hardly ever to suppur. Some such instances are mentioned, as in Prior, but certainly they are very rare. It often runs to effusion. The swelling in R. may indeed be chiefly from increased repletion of vessels, but often also a plain fluctuation may

he fell in Rheum. tumor of the joints. and the termination is rigidity of joints, & weakness of the moving muscles. This rigidity may be sometimes perceived very soon after commencement of the disease. In many cases it goes to a paralysis of the muscles. The bones too seem to be sometimes affected. to grow soft, & from this to become distorted. Many such distortions have been observed, where the joints have been swelled, stiff, & turned so that they bone must have been bent. as in fingers of hands turned upwards, or outwards &c — This paralysis of muscle seems to depend in part on the want of motion Any muscle loses its tone from want of motion. But the total debility left by Rhe. seems also to depend partly on the peculiar nature of infl. — Sometimes the stiffness & debility are irrecoverable, sometimes

it is curable, & by remedies quite different from those of acute infl. — In R. the acute pain shows infl. to be more in muscle — when there is no great pain unless on motion, it indicates the infl. to be more in capsular Lig. & aponeur.

There is also a tend. in Chr. R. to make the limb cold — that as the acute infl. of vessels weakens their tone, & leaves them in a state of debility — When ch. R. without generally there is very little swelling. Sometimes swelling redness, pain, somet. not. — A. R. is chiefly disease of youth, from 16 years to 28. Old people who have R. generally such as have been subject to it when young, & in whom the habit is left. R. may affect any constitution But chiefly of lymp. temp. & health. P. Yes not the disease of those that live high — attacks rather the poor — because they more subject to vicissitudes of heat & cold, & moist. — Spont. sweatings sometimes occur in this disease & sometimes these remove the affection. But sometimes the part affected does not sweat when rest of body does — This should be

attended to in practice, with a view to bring out sweat or pust affected by foment. — Nothing particular is to be learnt from the appearance of the urine in this disease. The blood always shews buffy coat, even great perfection in A. R. — The gelatinous fluid, is exhaled often into cellular subst. or bursae mucosae in R. sometimes produced when swelling in scroph. constit. The Pyrex. of A. R. seldom shews the violent general symp. of nervous affection which happen in the fevers — as Delir. Coma, loss of appet. &c

Rheum. cannot easily be mist. const. & cause or distinguish'd from gout — Causes & appearances of Surrey serve to distinguish it well enough from pains arising from Surrey — Causes & previous circumst. of R. distinguish it from pain in Lues. The Lues too generally attacks not the joints, but the middle & harder parts of bones, & these that are least covered.

R. generally of no danger — often it is however extremely difficult to cure, extremely painful, & apt to leave permanent bad effects. —

Plan of Cure of th. Antiphl. Reg. must be followed. Life
vivelation is to be avoided, especially that wd. arises from strong
food & drink. In general A. R. may be cured by diet
purely milk & veget. & not a large portion of milk neither,
but plenty of barley water, boat. gruel & such diluent
drinks — This very spare diet will cure sometimes
the C. R. as well as the acute. — But in acute R.
something more may be done. Generally the pulse
indicates bleeding, & th. P. bears it very well. Then
may indeed be counter-indication, when P. weak
old, exhausted general bleeding may be doubtful. Yet
even such P. have sometimes required bleeding
before cure could be effected. When P. young,
pleth. & constit. sound, bleeding may be freely used,
& repeated according to the urgency of the Symp.
Have been repeated 5 or 6 times wd. advantage
— But bleeding is still precarious. Tho it stops
the gener. peo. it often fails to remove the Inflamm.
When too freely employed it is also apt to induce
that state of debility wd. brings on C. R. — or which

tends to make the disease return. — Topical bleeding may be useful for removing the lost. pain. This often gives surprising & sudden relief. But this often only temporary, making disease shift its place rather than cured. From this it would seem (together with other circumstances wd. lead to same conclusion) that the disease depends more on general phlogist. diath. than on topical affection. — When general bleeding not to be ventured on Blisters have sometimes had a good effect — but they are uncertain, often fail & therefore not worth the anxiety much on. Purgery has also been recommended. It should be useful in removing Phlog. diath. but liable to many objections — chiefly because from the necessary motion it gives great pain & irritation & endangers the catching of cold — It has chiefly been practised, & sometimes wd. good effect, in comp. & such situations when sanatory could not be employed without the greatest danger of catching cold — Perhaps the good effect of Guiacum is from its

purgat. effect on some constitutions. — Topical bleeding is more powerful remedy for topical pain than Blisters, & blisters are superior in effect to Rubefacients. In some cases as in Lumbago, Sciatica, fixed R. pain in knee, in side, in shoulder, blisters have had a very good effect. For relieving the tumors that sometimes form on the joints from effusion, blisters the most powerful application & repeating them frequently, has a better effect, than keeping the blister open by ointments. —

The Remedy on which we chiefly rely for the cure of A. R. is sweating. But P. must be very careful to preserve himself from cold both during the operation of the sweating, & for a considerable time after it. — The best sweating Medicine is the union of an Opiate with an emetic, Dover's Powder, or as it is now called pulvis Ipecacuanae compositus. It is composed of gr VIII bitrtolated Tartar to gri Op. & gri Ipecac. Such a dose of Op. would produce sleep, but combined produces sweat. It used to be given in doses of gr XXX or from gr XX to gr XXX but in this quantity it was generally thrown up, yet it also

sweated. It is better to give it in doses of from gr x to xv
This dose to be repeated every 3 or 4 hours till sweat
produced, & afterwards every 6 or 8 hours as long as
we want the sweating to continue. P. should not
drink from the time he begins the powder, till sweat
is brought out, least the medicine should operate by
vomit. After sweat brought out, should drink freely
of diluent drinks, as barley water &c — during
the intervals of taking powders, we may give Ipec.
Mind. or any sudorific julep in small doses.
To produce full effect of sweating, P. should
be wrapped entirely in flannel — no linen about
him. We may also foment lower extremities
so as to make sweat as full & general
as possible. This is the method of producing
full sweating with the least skill. But it
must be continued for a considerable time,
48 hours not generally too long — sometimes
must keep it up longer. Short sweat does no
good — rather makes disease more obstinate, or

fever into the chron. form. When continuing the usual for a proper length of time might have produced a complete cure. — Sometimes P. very much weakened by Lancetting, giddy & like to faint on rising up, but from this no bad effect follows — by moderately supporting the vis vitæ it soon goes off.

Lancetting should not be begun till the fever is somewhat abated — not till the pulse is below 100 or about 90 — Opium has been recommended but except as a sudorific it seems rather to be avoided. Cicuta has similar effects, & is liable to the same objection. — Per. B. has been recommended. It will remove reversed intest. tho then lee good deal of Phlog. death. & even depressed infl. from this might be presumed to have good effect; but it is chiefly useful after the infl. symp. have been subdued & the P. much weakened. It has been said to be of service from the beginning of the disorder, but when used thus it will most

frequently fail completely. The Lond. Practice of giving B. was to give first for 2 or 3 days saline draughts then the B. in pretty large doses. But this has only removed slight attacks, & in more severe cases has seldom been of advantage. These are the chief pieces of practice in A. R. But we must also pay attention to the convenience & ease of the P. to the position in which he is placed, & to the most easy method of turning, or moving him or by using rollers, Towels, or to move him, & avoiding as much as possible every species of Irritation.

Chronic Rheumatism, requires a different practice. It would be in vain to try bleeding in C. R. tho the blood exhibits buffy coat, which indeed it may do for months, perhaps for years after the Acute R. subdued. Bleeding will give no relief. Bleeding locally may sometimes be of advantage as in Sciatica. Neither in C. R. benefited by purging, nor by full sweating. It is

however of great consequence to keep up a good degree of heat, & a proper perspiration, even a degree of moisture on the skin by drying warm, warmy flannel - especially by keeping the part affected well covered w. flannel. Heat may be applied in other ways - by vapor bath or what is next most powerful, by the dipped bath; or by pumping dipped water on the affect part. This is most useful when there is stiffness of the joints. (warm cataplasms may also be applied to them.) P. go to Bath or Buxton for the purpose of warm pumping, but some thing is good in any other place; & should not be neglected in stiff rheumatism. Temperature from 80° to 90° will be quite enough. Heat has been applied in dry form, hot dry sand or salt have been spread over limb. The flesh brush, or carefully rubbing body w. dry flannel should never be neglected. - The applica. of Electr. in sparks or even in shocks has been recommended. El. can do little to restore stiff joint, but it may be very

serviceable in restoring tone of Paralyt. muscle. And muscle gets paralyt. when joint stiff so that can not use the muscle. Electr. must be used for Palsy of muscle from compression, but in that from debility, it may be very beneficial. It gives the strongest known stimulus not only to the external surface, but to the internal muscular fibre.

The Cold Bath is very useful in C. Ph. besides hardening P. against vicissitudes of air it gives a powerful stimulus. P. may first employ pumping for some time of tepid water, for the shoulders, & then dry cold bath as general tonic. Shower bath gives the most powerful stim. & therefore best way of taking cold Bath. Sea bathing. The salt, as far as it has any effect, wd, cannot be very great than a beneficial one. P. not so apt to catch cold from sea bathing as from bathing

in fresh water - what truth there may be in this is perhaps not perfectly established - but since such is the general opinion it is not worth the effort. Cold bath has removed C.R. when all other remedies have failed. But P. should not stay but a very short time in the water. Bathing long continued relaxes, besides its chance of giving cold. No danger of catching cold from mere plunging, or from shower bath.

Several other external applications have been used - the hottest essential oils, as oil of turpentine, or balsam of Turpent. This some P. cannot bear unless considerably diluted. Of some kind as salt brine - the salt of no great importance - Sinapisms have been used. Kept on for ¼ hour they stimulate skin, for longer time they would blister, & therefore are not to be kept too long on - as blistering skin is not the effect we wish to produce,

It is of the highest consequence to take proper exercise in this disease. While pain violent this cannot be borne, but as soon as pain sufficiently allayed to admit of it proper exercise must be taken & persevered in. This is of more consequence to restore the part than any other application. begin at first with gentle exercise & increase it as P. able to bear it. The exercise must be suited to part affected - for lower extremities walking the best - for arms shoulders &c. the chest bell very good - The stiffness can seldom be removed without exercising the stiff limb - joint may even grow together when motion long suspended - therefore proper motion & exercise of part should be taken as soon & as strongly as P. can bear it.

Internal Remedies, in this disease are of no great moment. Oil of Turpent. has been recommended. One of the most convenient modes of giving it is

mixed w. honey. But it is apt to be extremely offensive to the stom. & bowels. – Balsam of Peru, Balt. Capivi have similar effect. (The best of these internal sweating medicines is Guiacum.) Sciatica or Rheum. pain in hip joint, has yielded to Terebinth. in dozes of ℥viii honey to ℥j Tereb. & taking ℥ss. Tereb. pr. day in quant of a tea spoonful at a time repeated – Guiacum in dozes of from ʒi to ʒij will purge. But ℥ss or more even ℥j may be taken pr. day in small dozes, thus acts as aperient, stimul. & sudorif. Guiac. best given in simple tinct. a tea spoonful taken either in water – or rather in milk 2 3 or more times a day. The simple tincture is better than the tincture with vol. Alk.. If vol. Alk. to be given it may be given alone. Some prefer decoction of Guiac. It may be given in either way. – Marland seed also to have good effect. Acts as general stim. Hepat. & diaphor. given in seed embrocated – Calomel, not much to be relied on. In obstinate

case may be tried. must be employed till it begin to affect the mouth. Cicuta has been recommended as a narcot. & relaxant. has similar effect with Opium. Must must be given in very small quant. 20 or 30 drops emet. some may be joined to it. Cicuta has given relief in some obstinate cases, without any addition. —
Aconite has been used for same purpose, & with a view to same indication — either in extract, or in dry powder of leaves. Must begin with small quant. as gri ss & increase it to 2 3 or 4 gr pr diem.

Whatever remedies we employ will probably be of little consequence without great attention to regimen, particularly in regard to exercise. The diet is also of great consequence. It must be spare so as not to keep up the Pleth. state of the body.

Diet must be chiefly of milk & vegetables, so as to keep the body open — avoiding every thing of difficult digestion, & every thing that tends to keep up or increase plethora. This mode of living has cured obstinate C.R. when all other expedients have failed. & generally without this other methods will be both slow & uncertain. Hence the propriety of avoiding spirituous liquors, or at least the taking them in spirits & water — as this tends counteract the cure by keeping up plethora.

#1103713701
v.1