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About the Institute
The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

4-4

Medicinal Plants

Drawings of medicinal plants

Class Diandria. Order Monogynia.

Veronica

Aira Caryophyllea.

Galium Verum Yellow Ladies Bedstraw

Primula. Farinosa.

Amomum Zingiber

Class Monandria. Order Monogynia.

Amomum Cardamomum.

Class Monandria Order Monogynia.

Curcuma Longa

Class Diandria Order Monogynia.

Rosmarinus Officinalis.

Class Diandria. Trigynia.

Piper Nigrum.

Diandria Trigynia

Piper Longum.

Diandria Trigynia

Piper Cubeba

Triandria . . . . Monogynia

Valeriana Officinalis.

Triandria. Monogynia.

Crocus Sativus.

Triandria. Digynia.

Saccharum Officinarum

Hordeum Distichon

Triandria. Digynia

Triticum Hybernum.

Triticum Hybernum

Triandria Digynia

Avena Sativa

Tetandria. Monogynia.

Plantago Major.

Class. Pentandria. Order Monogynia.

perennial

Convolvulus. Jalappa.

Pentandria Monogynia

Convolvulus Scammonia

Rhamnus Catharticus.

Capsicum Annuum.

Pentandria Monogynia

Hyoscyamus Niger

Atropa Belladonna.

Pentandria Monogynia

Nicotiana Tabacum

Pentandria Monogynia

Datura Stramonium.

Pentandria Monogynia

Solanum Dulcamara.

Pentandria Monogynia

Cinchona Officinalis.

Pentandria Digynia

Anethum Graveolens

Daucus Carota.

Coriandrum Sativum.

Pentandria Digynia

Pimpinella Anisum.

Pentandria Digynia

Ferula Asafoetida

Bubon Galbanum.

Pentandria. Digynia.

Conium Maculatum.

Pentandria Digynia

Cuminum Cyminum.

Pentandria Trigynia

Sambucus Nigra.

Pentandria Pentagynia

Linum Usitatissimum.

Hexandria Monogynia

Lilium Candidum

Hexandria Monogynia

Allium Sativum

Hexandria . Monogynia

Scilla . Maritima.

Hexandria Monogynia

Aloe Perfoliata Socotorina.

Hexandria Trigynia

Colchicum Autumnale.

Octandria Monogynia

Daphne Mezereum

Enneandria Monogynia

Laurus Camphora.

Class Enneandria. Order Monogynia.

Laurus Sassafras.

Class Enneandria. Order. Monogynia.

Natural Order

Laurus Cinnamomum

Ceylon Jamaica &c   Cortex, Bark

Warm aromatic

Enneandria Monogynia

Laurus Nobilis

Cassia Senna.

Decandria Monogynia

Cassia Fistula

Decandria Monogynia

Arbutus Uva Ursi

Decandria Monogynia

Quassia Amara.

Decandria Monogynia

Copaifera Officinalis -

South America West Indies-
bro' from Brazils

Icosandria Monogynia

Myrtus Pimenta

Icosandria Monogynia.

Prunus domestica.

Icosandria Monogynia

Amygdalus Communis

Icosandria Polygynia

Rosa Centifolia.

Icosandria Polygynia

Rosa Canina.

Icosandria Polygynia

Rosa Gallica

Polyandria. Monogynia

Papaver. somniferum.

Polyandria Monogynia

Papaver Rhoeas.

Polyandria Monogynia

Caryophyllus Aromaticus.

Polyandria Polygynia

Helleborus Niger.

Lavandula Spica 1

Origanum Vulgare

Come all ye Britons true & bold
Whose hearts are cast in honors mould
While British glory I unfold
On board of the Arethusa
She was a frigate tight and brave
As ever stemmed the mountain wave
And her men ever flamed
To their favorite launch

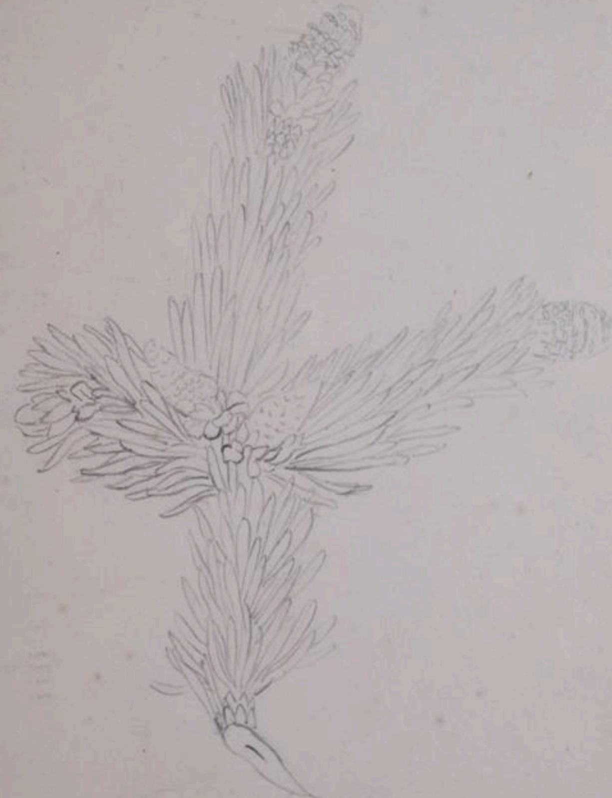
Class Didynia. Ord Angiospermia.

Digitalis Purpurea.

Leontodon Taraxacum.

Anthemis tinctoria

Monoecia Monadelphia



Pinus abies

Before we can attempt to follow the practice of medicine successfully and judiciously an intimate and familiar acquaintance with many of the collateral sciences is essentially requisite - a knowledge of the properties, chemical constitution, & mode of combination of the drugs we prescribe is necessary before we can ably them for the removal of disease - Anatomy teaches us the situation form structure & size of the various organs of the body - Physiology teaches us the functions & use of each in the animal economy - & Pathology as that part of medical science embracing the morbid alterations of structure produced by disease is a most valuable & important division of that subject -

1st We must understand the changes produced by disease in the location - form, size & structure of the affected organ

2nd We must furnish a satisfactory explanation of the cause of this change

3d We must compare the organic changes with the symptoms - analyse the symptoms & determine whether they are dependant on the organic change - -

In organic diseases there are two set of symptoms 1st vital - or functional & 2nd mechanical or physical - those strictly arising from visible alterations of structure -

Diseases are either functional or organic - we may however have a union of the two

The class of diseases called neuroses are arranged by functional symptoms and here Pathological anatomy furnishes no discovery of organic lesion

Anatomy - Physiology & Pathology are then necessary to the discovery of a symptom of alteration from the natural state or functions of organs - & by an assemblage of these symptoms we recognise diseases -

A Symptom is an alteration of structure or function in an organ - evident to the senses - A Sign is a conclusion drawn by the lowest of reason from the symptoms - there are three kinds of signs I Diagnostic or Pathognomonic those by which the disease is marked in its present state II Commemorative those shewing the last stages, always drawn from an investigation of the causes of the disease & III Prognostic by which we can predict the termination of the disease.

Symptoms are obvious changes in the structure or functions of organs produced by disease - Some very important ones are derived from the state of the circulation -

The Pulse is that beating of the arteries produced by their contraction & dilatation - Caution are necessary in examining this - We should during the operation till all agitation subsides - never feel the pulse while the patient is speaking - We should examine both pulses as they often differ and while doing this the arm should be rather extended before arm bent & placed midway between pronation & supination - supported by the hand of the practitioner, he should now press upon with four fingers for a moment then gradually diminish the force & repeat it at intervals, continuing it during 40 or 50 pulsations in order to ascertain the force & regularity - The pressure should be proportioned to the depth of the artery -

Natural pulse is equal, flexible, neither frequent nor slow, sensible to every movement whether of mind or body - In the first months of human life 140 to 130 - second year 100 at Puberty 80 in manhood 75 to 75 in old people 50 to 60 greater than in adults - The pulse in females is always quicker than in males and is accelerated during Utero-gestation - It also undergoes some diurnal variations and becomes quicker towards evening - Its varieties in strength consist in frequency & slowness, hardness or hardiness - Largeness or softness - fulness or smallness - regularity or irregularity -

Frequency - Pulse at 90 is febrile but this does not constitute fever - a frequent pulse is common in inflammations, active Hemorrhages & nervous diseases - frequent pulse is a good sign in Phthisis, Palsies & other nervous disorders, but if frequency is combined with smallness it is a bad symptom - If full & strong at the same time that it is frequent it shews that there is no exhaustion - In the crisis of fever the pulse becomes full & strong -

Slowness The pulse is slow in most chronic diseases - it does not preserve this character till they have existed for some time, it is slow in some typhoid fevers - in nervous fevers & other nervous affections - In some organic lesions of the heart - It is often as low as 35 in coma & dry hemiplegia - If after frequency in acute diseases the pulse becomes slow without exhaustion it is favourable as it shews the cessation of the inflammatory process -

Hardness of pulse is that state in which it is incompressible & gives to the finger a sensation as if struck with peculiar vibration - It is found in the first stage of inflammations - inflammatory dropsies sanguineous hemorrhages - In typhus hard pulse is not a bad symptom for the first few days - but if it continues hard after the crisis it indicates inflammation or termination in some other disease - effusion suppuration &c - In typhus & most chronic diseases hardness of pulse is combined with two distinct sets of symptoms & in nervous diseases it is hard quick small & irregular - Urine pale & limpid in Hooping generally increased - often suppressed - & no heat of skin - this is most dangerous - In the hard pulse of inflammation it is also sharp & frequent & urine red & fiery - Heat & fever intense, with fixed pain in some organ - In inflammatory diseases the pulse is one of the most useful diagnostics - In continued fever - hard pulse indicates inflammation somewhere - Hardness of pulse when accompanied with acute pains in the chest during Phthisis indicates inflammation of a fresh portion of the Lungs - In dropsies hard pulse is indicative of inflammation -

Softness The soft pulse is compressible & arises from diminished impetus in the passage of the blood through the vessels - It is natural to leucophlegmatic & scrofulous diathesis, also to women & children - The pulse always becomes soft before critical evacuations - It is soft in the second stage of typhus sometimes in the first stage - It is also soft in inflammation accompanied with typhus - & in chronic diseases - Softness of soft pulse is favourable when succeeding to a hard one - if regular - also in acute diseases when from being hard it becomes soft & regular the tongue clean & moist & the pyles recover their vivacity - The pulse in exhaustion is soft, frequent, irregular & often intermittent -

Strong pulse depends on the force & volume of the pulse which strikes the finger with firmness over a large surface - The pulse is strong in chronic fevers - in diathesis of cold climates, in inflammations, active hemorrhages sanguineous apoplexy & inflammatory dropsies - here it is a good sign

as it shews that there is sufficient power in the system to enable it to bear the treatment necessary for reducing the disease - If strong in fevers after the crisis it indicates inflammation The strong pulse is favourable in apoplexy & Dropsy as it shews that the system will bear depletion.

__Feeble__ pulse is slightly felt by the finger and to a small extent. it occurs in Typhus & nervous fevers - passive hemorrhages & the greater part of chronic diseases, atonic Dropsies & most spasmodic diseases, in intestinal inflammation as Gastritis &c. When in local inflammations the pulse before strong becomes feeble soft quick & intermittent it indicates the transmission of the part into Gangrene.

__Full__ The full & small pulse depend on the volume of the artery in the act of dilatation - Fulness therefore depends on the extent to which the artery dilates the pulse is often full in inflammations, active hemorrhages. Dropsies &c it is a happy omen in most diseases - Full pulse is favourable at the crisis of fever. - A __very full__ pulse in Apoplexy is dangerous. The danger in all comatose disease is in a ratio with the fulness of the pulse. -

__Small__ Pulse is found in diseases affecting the abdominal viscera in the commencement of inflammations - Dropsies from debility & long continued suppurations - A small pulse is a bad symptom in most disorders as well as in fevers - It precedes & foretells anasarca after cutaneous eruptions -

__Regular__ pulse is that in which the beats are separated by intervals of equal duration. it occurs in most acute diseases. In some persons whose pulse is naturally irregular it becomes regular in disease

__Irregular__ pulse is that in which the beats are separated by intervals which are not equal - some being longer than others - This occurs in the decline of most diseases - The pulsus dicrotus or bisferiens is an irregular pulse in which we have two pulsations quickly following each other - & then an intermission of some duration - it is said to be a sure precursor of hemorrhage from some organ -

The morbid changes in the tongue are referrible to its __dryness__ - __coating__ __colour__, __Volume__ & __movements__. Typhus will be shorter in duration the sooner the tongue becomes dry. If the tongue is dry at the commencement of fever it is a bad sign - if black it is worse - and if black hard and chopped and the other symptoms correspond we may predict a fatal termination. -

The healthy tongue is clean and moist - but in disease it becomes coated or furred. It is __whitish__ in Gouty affections, Dyspepsia, Rheumatism and Catarrh shewing the existence of sympathy between the skin Lungs &c If in fever the tongue previously clean & dry becomes furred & white there is a deposit from the urine & vapour forms on the skin we may predict a speedy & favourable termination of the disease. When the tongue is only coated between the papilla leaving them prominent & exposed, it indicates diminished secretion this kind of tongue is common in Dyspepsia depending on debility of the muscular coat of the stomach. - in healthy persons after a full meal - also in Hypochondriasis and atonic Gout. When it occurs in low nervous fevers - the debility thus shewn indicates the long continuance of the disorder The coating is sometimes thick and opaque this is called a __loaded tongue__ it is more dangerous in acute than in chronic diseases - is noticed in Dysentery, Small pox & in Epidemic fevers which are generally followed by Stupor - When this coat is firm & thick it foretells the continuance of disease. It appears to depend on a relaxed & debilitated state of the vascular system which being in a state of relaxation allows the more easy transmission of fluids through the vessels -

__Colour__ The __White__ tongue is common in Gastric affections and chronic diseases. & the continuance of the whiteness indicates the continuance of the disease it is met with in Catarrhs &c. __Yellow__ The tongue is yellow in Jaundice & Chlorosis - During the greatest intensity of Typhoid fevers it is of a deep yellow or brown - sometimes even black - A __Black__ tongue is very unfavourable in acute diseases especially if accompanied by much debility. Intense heat of the system will blacken the tongue but this indicates nothing It may be dry in fever from the patient sleeping

with her mouth open – Black tongue in chronic disease with Hepatic disorder always presupposes unfavourable debility – A Clean red tongue is a bad symptom in Eruptive fevers & most acute diseases especially if it continues red & shining after the eruption appears. If occurring after loaded tongue in acute diseases with debility it is unpropitious. If without much prostration of strength but with intense thirst, heat and high coloured urine internal inflammation has taken place

Size if large without inflammation & its movements difficult in acute diseases it is unfavourable as there generally exists some Cerebral disturbance. If is diminished in size soft & moist in chronic diseases terminating in Marasmus – Shrivelled & hard tongue in acute diseases is a more formidable symptom being produced by spasm of the neighbouring organs. Movements In typhus the tongue is generally dry & rough – If trembling dry & black it foretells dangerous pectoral symptoms The trembling tongue generally accompanies and precedes Apoplexy – Paralysis of the tongue may occur on the contrary side to Paralysis of the body though generally observed on the same side –

The Urine may be affected in three ways The evacuation may be painful constituting Dysuria – may flow with difficulty & in drops – Strangury and the secretion may be suppressed – Ischuria beside these we may find alterations in the fluid itself. – It is generally less in quantity in the commencement of all diseases having sometimes a white deposit. Is generally diminished in acute diseases which are unfavourable in proportion to the degree of diminution – At the termination of fever scanty urine indicates effusion and subsequent Hydrothorax – A too abundant secretion may arise from relaxation or irritation of the Kidnies and does not indicate Diabetes mellitus which is a disease depending on alteration in the quality of the urine Emaciation follows continued increased discharge of urine If diminished in Melancholia & Hypochondriasis it is an unfavourable symptom – If accompanied by a severe pain in the Kidnies it indicates

The limpid colourless urine common in nervous & Typhus fevers if accompanied by no deposit hot & dry skin &c &c indicates an unfavourable termination Turbid urine when containing thick gelatinous matter There is a turbid state of urine in which the matter concretes into flakes which render it flocculent – & is seen in obstinate intermittents, Hectic & Gouty affections – The urine in jaundice is said to contain much free ammonia – When thick & turbid afterwards throwing down a deposit it is a favourable sign – The urine is bright & red in inflammatory diseases depending on an increase of that secretion. It is brick red & turbid in the second stage of intermittent Rheumatism Gout & Dropsy – Red urine in chronic affections is indicative of Hectic – When redness approaches brown or black it is an unfavourable sign – Urina Juventosa.

The urine may have a cremor or pellicle – it may be cloudy or it may throw down a deposit or sediment – The Pellicle consists of salts & gelatine of many colours. this is inauspicious – it announces the commencement of Hectic The cloud is seen half way between the pellicle & bottom of the vessel when long continued it often indicates vertigo delirium &c

Our best signs are drawn from the deposit. this is slight in the commencement of fevers supervening on acute diseases. and is generally observed at one of the critical periods of fever – on the 7th 9th 11th or 14 day of fever when it indicates a speedy convalescence – Pale lemon coloured urine occurring in acute diseases indicates spasmodic state . . . and in chronic diseases their long duration If on cooling it becomes white and deposits it is a favourable symptom –

In Jaundice the yellow urine will differ in the critical or idiopathic and the symptomatic – In the critical jaundice it is not yellow – but in the symptomatic we find the urine of a deep yellow colour

Classification of Diseases.—

Diseases are divided into local recognized by local symptoms and general involving the whole system.—
The general diseases are fevers which though all affect the whole system are divided from their duration into intermittent & continued
Continued fevers are again subdivided into 1 Continued fevers not necessarily attended by a local disease & 2. Exanthematous fevers necessarily accompanied by specific local symptoms as for example Rubeola Vaccinia Varicella &c
Intermittents are only subdivided into two kinds the regular & irregular
Continued fevers unattended by local symptoms have been divided into Synochus, Synocha & Typhus. These are acute diseases of the whole system
The chronic general diseases are Scrophula. Cancer, Secondary Syphilis, Scurvy &c
Local diseases are referable to four kinds. 1st Diseases of circulation 2nd of Secretion 3dly of the nutritive process. & 4th of function of the part
I Diseases of Circulation are as follows 1 Congestion or Engorgement 2 Inflammation & 3dly Haemorrhage 4 acute inflammatory dropsy
II Diseases of Secretion are of three kinds 1 Increased secretion 2 diminished & 3dly depraved secretion the first or increased is exemplified in Hypertrophy the diminished in atrophy or wasting of parts & the third or depraved is the source of all organic diseases or accidental productions as tumours - tubercles - fungus - medullary Sarcoma and Cancer. these although depending on the general system produce a local disease —
III Diseases of Function - these arise from disorder of the nervous system of the part - the nervous system is liable to increased sensibility diminished sensibility & irregular sensibility - Those local diseases attended with increase of pain without inflammation are referable to the first kind - those attended with diminution or loss of sensation to the second and all spasmodic diseases may be referred to irregular nervous irritability constituting the third class —

Acute diseases of the whole system.

General diseases must arise from disorder of the circulating or nervous systems, Fevers are examples of acute diseases of the system but from what cause they arise is unknown and indeed there is no symptom which can be considered as pathognomonic of fever it is known by an assemblage of symptoms each of which individually would be

perfectly inadequate to characterise the disease. It is a disease sui generis and has only four symptoms which may be considered constant 1. Increased frequency of circulation 2. Increased animal heat 3 Increased thirst & 4 very great lassitude.
Quickness of Pulse. This is not a diagnostic symptom of fever - for the pulse is not quick in all its stages - and in Typhus the pulse is often very slow. this therefore is not pathognomonic diagnostic or essential to fever -
Increased temperature depending on an excited state of circulation is present in most fevers. and we have almost always alternations of heat and cold. Some fevers are accompanied in their whole course by a sense of cold. - this is therefore more inconstant than quickness of pulse.
Increased thirst This though a very common symptom is sometimes absent in every stage of fever - we find it also prevailing in many diseases not febrile.
Lassitude is never absent in fever but cannot alone constitute a diagnostic character as it is present in many other diseases. Fever therefore consists in the combination & succession of all these four symptoms Heat followed by cold next heat with thirst and then lassitude.

Fever may be understood in two senses. I- When it arises from a disordered state of the circulation ~~arising from~~ depending on the presence of some local disease of which it is a symptom - this is Symptomatic fever Idiopathic fever is a disease sui generis having the same characters as symptomatic but with additional symptoms & which though there be no quickness of pulse, no thirst, no heat of surface is still fever in all its stages
Symptomatic fever - one essential character of this disease is that the fever being removed the local disease may remain - it is sometimes called irritative fever - It is connected with other diseases in two ways. either as a necessary symptom which keeps pace with the disease and is never removed till the disease is removed - as in Inflammatory fever; - fevers attending suppurations as in the Hectic of Phthisis - in Tabes mesenterica and this fever is supposed to arise from the absorption of pus — The fever is connected with other diseases as an accidental

consequence this we have symptomatic fever occurring in Chlorosis in worms - after extensive depletion. This latter is referable to the increased circulation which often follows losses of blood - & produces heat thirst, quick pulse & after the excitement has subsided lassitude - which in symptomatic fevers is very slight. the symptoms in this kind of fever consist in disorder of the circulating & secreting system without any nervous symptoms - In idiopathic fever the nervous system is first affected we find great cerebral excitement, delirium loss of memory - both of persons & things &c - If the nervous system is at all affected in symptomatic fevers it is towards their termination. The glandular system is never affected. The symptoms then which constitute Symptomatic fever, are, - slight shiverings followed by heat, increased perspiration, thirst, frequent pulse, flushing of the face, & redness of the cutaneous surface. These are all referable to excited circulation, & our intention of cure will therefore be directed to those means which reduce the circulating fluid -

The causes of symptomatic fever are easily detected while those of Idiopathic are obscure & hidden the progress of symptomatic fever differs entirely from that of Idiopathic - The duration of symptomatic fever varies according to the cause. Idiopathic fever rarely lasts longer than the 21st day. In treating symptomatic fever our object is to remove the cause - but how can we remove the cause of Idiopathic fever which is quite unknown to us in nature mode of attack &c.

Idiopathic fever is a disease of the whole system but it does not affect all the parts of the body in the same degree - Fever must be known by the combination & succession of symptoms; there appears to be no connection between the symptoms of fever, and the presence of one does not necessarily imply absence of another.

The morbid condition of the vital properties is the first symptom of fevers hence called diseases of life - in them all the vital functions are more or less disturbed hence we find inordinate action of the heart & arteries, interrupted respiration - loss of voluntary motion -

affections of the sexual functions - appetite diminished, thirst increased. The mental faculties are also disordered - perversions of sense loss of judgement & memory. delirium & watchfulness. There is also a peculiar physiognomy in fever by which the disease may be almost diagnosticated by an experienced observer

Secondly Fever is a disease composed of many exacerbations as is seen in Intermittent & continued fevers. an exacerbation in continued fevers generally occurs every night - this exacerbation as the fever declines may only come on every second day thus converting the fever into an intermittent. In intermittents the paroxysms may come on so quickly as to make it continued. Most continued fevers are composed of several exacerbations which run into each other.

There are certain days on which crises take place in fever - in the third as in the Ephemeral fever - 5th 7th 9th & 11th days. the exacerbations occur on these days constituting the Tertian; but after the 11th day the next attack takes place on the 14th then 17th &c the fever now assuming the Quartan type - these exacerbations are observed previously to the occurrence of crises -

Thirdly Every fever except symptomatic begins with a disagreeable sense of inward cold attended with trembling & involuntary shuddering, great loss of strength, sense of languor, sluggishness, moroseness of temper - loss of muscular power and great heat. Sometimes the fever sets in with heat at first the coldness being so slight as to pass unnoticed

Fourthly Fever is an acute general disease running its course rapidly never exceeding thirty days. - the extreme danger & prostration of strength is not seen in symptomatic fevers. The disorder of the nervous system - mental affections delirium &c distinguish it from symptomatic fever in which no cerebral disturbance is observed. The danger in fevers depends on depression of the vital powers - hence no patient can be pronounced out of danger at any time - till the fever has quite subsided. -

Fifthly

Sixthly

Seventhly Fever exhibits a peculiar tendency to sudden & unexpected termination both favourable & unfavourable arising from a vital action and called critical terminations. — We cannot prevent its progress during an attack. it always runs through the whole paroxysm & if the cold stage is present we cannot prevent the occurrence of the hot & sweating stages. — The efforts of nature are always in operation to obtain a termination & without these art has little effect. The principal characteristics of Fever then are as follows

1 It is a disease of the vital & animal function
2. It commences with Chilliness.
3 It is composed of paroxysms with intervals of perfect health.
4 Alteration in the pulse & animal heat.
5. Its course is very rapid & its character acute
6. It presents many fluctuations & variations in its course
7 It has a tendency to terminate at particular periods of its course.

Intermittent Fever

Intermittent are those fevers which return in paroxysms with an interval of complete apyrexia. Each paroxysm is attended by all the symptoms of fever & has three stages the cold stage, hot stage & the sweating stage. Every attack is preceded by certain premonitory symptoms — as languor, aversion to motion, & yawning. The face & especially the lips & nose is affected by paleness & coldness and lividity, extremities cold. an universal sense of cold succeeds to this a peculiar chilliness running up the spine, skin constricted, Pulse quick but small. — The coldness now increases so much that the patient is obliged to go to bed — this having lasted for some time The first stage of fever commences. & is ushered in by shivering increased sense of internal cold. — involuntary tremors & universal shaking of the whole body. — in infancy these shiverings are often attended with true Convulsions — notwithstanding this sense of coldness. the temperature of the body is really natural except in cases of old persons when we sometimes find absolute cold. The expression of the Eyes is dull. Apetite lost. there is often nausea & vomiting

the thirst even in this cold stage is very severe. The Secretions and Excretions are differently affected. The Eyes overflow with tears, Bowels costive — Urine copious, limpid & colourless — Skin dry. Dyspnœa. the respiration being very laborious Cough — Palpitation & excessive anxiety of countenance. This stage is the most dangerous. from the repulsion of blood from the external parts in consequence of which the internal organs become engorged with blood and may cause death by Apoplexy — or produce suffocation from pulmonary congestion —

Second stage In this stage the warmth begins to return in the extremities & face — Respiration becomes quicker & easier — Pulse fuller & stronger — Thirst diminishes. — The pains in the limbs continue — the Urine is high coloured & its evacuation is often attended with a sense of burning. — The heat at length becomes universal with great redness & dryness of the cutaneous surface. & severe headach. — from the continuance of this pain in the head & increased heat. The respiration & circulation become again accelerated & the breathing difficult. — some patients are delirious. others are convulsed. & others lie in a deep sleep. The heat having become intense & diffused over the whole body. now diminishes. The skin becomes moist & relaxed & after a duration of from 1 to 4 hours end. In the third stage, the length of the hot stage does not bear any ratio to the extent or degree of the cold stage

Third or sweating stage. The Urine is now evacuated plentifully is turbid & deep coloured. & deposits on standing a lateritious sediment or sometimes a rose coloured one — The headach is relieved. there are often copious evacuations from the bowels. — the fever abates & the skin becomes covered with a profuse perspiration which exists for some time. — Sometimes the crises of fever terminate by fœtid offensive fæcal evacuations instead of by sweat. These Evacuations having subsided. the fever terminates. and the patient only now complains of slight headache & languor, these are followed by sleep from which he awakes quite well and in a state of perfect apyrexia —

Intermittent fevers are divided into three kinds the Quotidian Tertian & Quartan – The Quotidian is that in which the paroxysm occurs once in every twenty four hours. The period of the attack is generally in the morning of each day

The Tertian is when there is an interval of an entire day between each paroxysm..

The Quartan is that in which there is an interval of two entire days between the paroxysms. The attacks generally occur in the Evening

Fever thus considered appears very simple but it may be complicated in many ways – Two intermittents may exist at the same time

If a double quotidian the patient will have two paroxysms in the same day – one in the morning another in the evening

A double tertian presents two forms there may be two paroxysms in one day. then an interval of two ~~or three~~ days. with a recurrence of the two paroxysms on the third, or there may be a double tertian with daily paroxysms. and the double tertian will be distinguished from the simple Quotidian by the exacerbation occurring in the morning of one day. and in the Evening of the next – & so on.

In the double Quartan. there are two paroxysms on one day – none on the second & third – & two again on the fourth day. – Or again there may be a paroxysm in the morning of the first day – in the evening of the second day – with a complete interval on the third day. another paroxysm on the morning of the fourth day. – in the evening of the fifth day & on the sixth day an interval –

In a double Intermittent the successive paroxysms always occur at different hours. – the alternate paroxysms come on at the same hour and bear a perfect resemblance to each other.

Irregular Intermittents are those in which the paroxysms do not recur at stated intervals – There are four kinds of irregular intermittents

First or Febris larvata the masked intermittent does not present a single stage such as generally occurs in a regular paroxysm it has neither cold hot nor sweating stage – but instead of these is known by the existence of paroxysms of another disease thus the patient may have headache, or Epilepsy asthma &c occurring at a particular time, continuing during a certain period, and then leaving him. It is however still an intermittent as it occurs in paroxysms with distinct intervals. Febrile symptoms may occasionally manifest themselves & thus will render the diagnosis more certain & easy. When the disease which assumes the place of the intermittent disappears. there is always. a crisis observed. generally indicated by a lateritious, pink coloured sediment in the urine & sometimes but not necessarily by copious perspiration –

Second. In this variety all the three stages of the paroxysm occur and are at the same time complicated with symptoms of some local disease These diseases – which are combined with fever may be inflammatory as in Phrenitis & Pneumonia two very common examples. or they may be nervous diseases. as .. Febris comitata

Third. In the third class. the order of the stages in a paroxysm do not correspond in every case. thus the fever may commence with the hot stage nor are the stages always present but the paroxysm may consist of two stages only, the third stage not being present – – these are anomalous fevers

Fourth. Where the intermittent is partial affecting perhaps only one half of the body. or one side – most commonly affects half the head constituting intermittent hemicrania. These intermittents are called irregular not because they are complicated with other diseases, but because their attacks do not maintain a regular correspondence. they may be for some time quotidian then may become Tertian or Quartan – They are always very dangerous & have hence been called Malignant fevers – In these malignant intermittents we often find that one of the stages of its attack is greatly prolonged & they have received different names from this circumstance thus when the Cold stage is prolonged. Febris . When the hot stage is excessive it is called Febris Lipyria & where the sweating stage is long. Febris sudatoria

Causes of intermittents. There is no country in which intermittent fevers do not occur, but their birthplaces are undoubtedly those countries which abound with swamps & marshes. They do not however recur in these localities only. We find them in large towns depending on the effluvia arising from common Sewers. They are frequent in lands which

are liable to be inundated by the overflowing of streams or rivers. especially if these be planted with Turnips or other vegetables as these undergo quick decomposition. The decomposition produced by the Sun & Moisture on vegetable matter produces effluvia which are called Miasmata. the atmosphere is said to be then deteriorated by a want of Oxygen & it is well known that such situations abound in Hydrogen & Nitrogen from the vegetable decomposition. This however is erroneous as it has been proved that the Oxygen in these cases is always present in its usual relative proportion & that it never varies. What then is the cause of fever? Is it the Humidity of the atmosphere; no, for where this the case we should have intermittents after every heavy fall of rain. still we never have intermittents without moisture. It appears to be owing to some specific principle exhaled from marshes during the process of decomposition whilst the marshes are drying up from the Solar heat. That there is some Chemical decomposition going on is certain as Carburetted Hydrogen has been often collected in marshy places. and it is to the incandescence of this gas that the phenomena called "Will o' the Wisp" is attributable. I do not mean to argue from this that fever is produced by the vitiated state of the atmosphere arising from the generation of Carburetted Hydrogen. It is a fact well known in countries where intermittents prevail. that at a certain height above the miasmata arising from the marshes. there is no danger of contamination this height does not correspond to the height to which the vapour ascends. The Concurrent or predisposing causes are damp & moisture, low living, the influence of depressing passions, exhaustion whether corporeal or mental. in fact all the causes are of a debilitating character. excesses of any kind.

Terminations of intermittents. These fevers possess a remarkable tendency to affect the abdominal viscera, During the cold stage of an intermittent the digestive functions are much deranged. as shewn by the constant nausea and vomiting and there is great thirst which is best relieved by the exhibition of mild diluents. The blood in this stage seems much congested in the whole system particularly in the Vena Porta. Thus the termination of fever in Hypertrophy of the Liver Spleen &c or in Dropsy is probably attributable to

this congested state of the Viscera. leaving a disposition if continued to produce permanent organic disease. The disease formerly mentioned viz Enlargement of the Liver & Spleen are known by their particular symptoms. in Enlarged Liver we shall find Jaundice. pain in the region of the Liver, hardness in the right hypochondrium felt on pressure. Clay coloured stools. high coloured urine. The dropsy which follows intermittents may be of two kinds Dropsy of the cavities & Dropsy of the Skin. The dropsy of the cavities as Hydrothorax & ascites is the most common because enlargement of the Liver & Spleen almost always produce ascites. Dropsy of the Skin. Anasarca is sometimes a consequence of these enlargements which by impeding the circulation in the Liver will produce disturbance of the general circulation. Intermittents sometimes terminate in Continued Fevers. this termination is unfavourable. & is produced by the anticipation of the paroxysms or their recurrence at each relapse some hours earlier than customary till at length the fever assumes the continued type.

Pathology of Intermittents. It is a species of idiopathic fever the symptoms are evidently produced by lesion of the nervous system. for as in all other nervous affections the disease returns in paroxysms. this never occurs in continued fever. the affection is entirely distinct from inflammation but may be preceded, accompanied or terminated by inflammations. it is equally complicated with nervous affections. The inflammatory affections which accompany intermittents are cured by the same remedies which remove the fever. proving that they are only the consequence of the existing disease & have no effect in producing it. Thus, by removing the cause we remove the effect also. The part of the nervous system primarily affected in Intermittents is the Ganglionic system the terminations of which on the surface of the intestine and skin render it particularly liable to external impressions from Malaria. The brain is rarely affected in Intermittent fevers. & when it is so this is generally a secondary effect. Delirium will therefore be an uncommon symptom especially during the first stage of these fevers. The skin is the part which chiefly comes into contact with the exciting causes or Miasmata & hence we are able to explain the contraction dryness & coldness in the first stage of intermittents.

Prognosis is that part of medical science which teaches us to distinguish between favourable & unfavourable symptoms. In fever our prognosis must be founded on the terminations. When simple & uncomplicated it is favourable

The more acute the disease the more easy is the cure. – Intermittents occurring in old-worn out subjects are almost interminable and usually terminate as before stated – Double intermittents are always more obstinate and unfavourable than simple ones. Our prognosis will be always favourable when the paroxysms are retarded – unfavourable when accelerated. Return to health is indicated by a regular type – by the paroxysms becoming distinct & complete every return being less severe – by the hot stage being preceded by a slight cold one.. appetite & digestion amended by improved complexion which in Intermittents is always yellow. It will be unfavourable when the patient is weak & unhealthy, consumptive, old, worn out by great mental distress or bodily exhaustion. Epidemic intermittents sometimes put on an unfavourable character. Autumnal are more unfavourable than Vernal intermittents and for this reason – that they are mostly Quartans & of long continuance but the worst form of all is the irregular intermittent when complicated with other diseases both inflammatory and nervous. and it is still worse when the fever is disguised by these diseases. The termination of intermittents in organic disease as Enlarged Spleen – liver &c is always unfavourable whatever be the character of the individual but more especially if the subject is weak

There is no theory which explains satisfactorily the complete interval of ease which occur between the paroxysms of an intermittent; all nervous diseases have more or less of this tendency but none so distinctly – Even in the most perfect health there is a degree of diurnal fever which comes on towards night and goes off in the morning – this is easily distinguishable from a Quotidian intermittent in which the attack commences in the morning. The continuance of the fever is not attributable to continuance of the Causes – for although a patient be removed from the situation producing it, yet the fever continues.

__Treatment__ This refers to two periods the paroxysm & the interval. No art can shorten a paroxysm so that all we can do during the existence of a paroxysm is to palliate & relieve the symptoms. The predominant symptom in the first stage is cold. Heat must be applied externally by warm baths and fomentations &c, internally by warm diluents – another indication is to relieve the thirst which in the cold stage is insatiable, this depends upon disorder of the stomach. This is best relieved by giving mild Emetics as Infusum Anthemidis. Pulv: Ipecacuanha – &c we must not use Antimonials. In the __second__ or hot stage our objects will be to moderate heat & the intense

headach which occurs. We must administer cold drinks cautiously. Warm acidulous drinks may be given freely. – Never bleed during the hot stage of fever to relieve the headach even though the state of the pulse may seem to indicate this, unless there is stupor – coma & high delirium and even then the bleeding must be small. – The headache is almost immediately relieved by Opium which also favours the coming on of the sweating stage. In the __third__ stage we have very little to do. – If perspiration flags we must give warm diluent drinks to keep it up for two hours – Should it much exceed this – we must gently repress it – & this will perhaps be best done by allowing the patient to get up and dress without any exposure to cold. – Should the thirst however continue longer then we had better give the mineral acids. – Our treatment during the interval consists mainly in the exhibition of Peruvian bark but this cannot be considered as specific in every case. There are three forms of intermittent fever to which the use of Cinchona is not applicable these Inflammations – Disorders of the Stomach & digestive organs and complications – When there is inflammation present we must bleed exhibit saline purgatives & after the inflammatory action has been thus reduced we may use the Bark. If the skin be dry with either coldness or heat the greatest benefit will be derived from a combination of Opium, Calomel & Antimony. – this formula will even sometimes cure intermittents especially those where the skin is dry & chilly. – When there is no inflammation – the functions of the bowels are regular – subsidence of the Gastric irritation & the skin is rendered natural – we may commence the Cinchona. The action of Cinchona in curing intermittents cannot be explained as we do not know the causes upon which the disease depends – but we are certain that it has a great tendency to remove the periodicity of the paroxysm by rendering them more distant from each other and shorter. —

Bark must be administered in the intervals of intermittents in quantities depending upon & proportionate to the type – violence & duration of the fever. – The quantity of Bark formerly given between two paroxysms of a Quotidian was half an ounce this contains five grains of Quinine – One ounce was given in the interval of a Tertian & two ounces in the interval of a Quartan. These doses were very bulky & frequently productive of a violent & distressing nausea, or in some cases of Diarrhœa. – but we have now the advantage of being able to give the peculiar principle on which its activity depends i.e. Quinine to a much greater extent if necessary without the occurrence of any of the above mentioned disagreeable symptoms. – If the quantity administered in the

first interval be insufficient to retard or moderate the paroxysm we may increase the dose a little till the exacerbation is considerably shortened & by continuing this - after one or two intervals the return of the paroxysm will be altogether prevented. - Formerly ℥i of bark was given every four hours between the paroxysms till they were relieved - It has been proposed to give the whole quantity at one dose - but there are some strong objections to this mode of administration for it is apt to disorder the stomach & occasion excessive headache ^inflammation & constriction of the chest^ but as it is an acknowledged maxim that "the less bark we can do with, the better" - a more advantageous mode of using it will be to give ℥i every hour during the last few hours before the expected return of the paroxysm - The quantity of Quinine usually administered in the intervals of the attacks is gr viii in Quotidians gr x or xii in Tertians & gr xx in Quartans. We must not discontinue the use of the Bark when the paroxysms cease, continue it for about three weeks after they are removed so as to prevent the danger of a relapse.

Irregular Intermittents are not to be treated in the same way - for if the patient has an intermittent complicated with inflammation of some organ it will be necessary to bleed in the intervals so as to reduce the circulation and we must also give them low diet - & other antiphlogistics. But the attacks of these complicated intermittents are sometimes attended with extreme danger rendering it incumbent upon us to prevent the return of the paroxysms. & here our chief dependance must be placed on the Cinchona - we must therefore after treating these complications in the interval throw in the Quinine in large quantities so as to prevent the return of exacerbations - Bark however is not the only medicine that prevents the return of the paroxysms of intermittents - it sometimes fails. we find some cases in which the Liquor arsenicalis is more successful. this solution may be given in doses from gtts v to gtts viii ter die in adult subjects. Sulphate of Copper & Oxide of Zinc have been also successful & lately a peculiar principle of the Pepper. Piperine has been much extolled by the French in doses of gr viii to gr xii or ℈i - it is said to be equal to Quinine. The Paroxysms are sometimes prevented by a combination of astringents with Tonics, formerly a combination of Pulv. Anthemidis et Gentian. with Sulphas Aluminis was much used - thus we see that it is neither the tonic or astringent properties of bark which render it specific in Intermittents

but this action seems to depend upon a peculiar property the operation of which in the animal economy is unknown - but which acts by preventing the periodicity of the disease.

Continued. Fevers

There are no such things as remittent fevers - for if there are distinct exacerbations & remissions it must be intermittent fever. - Continued fevers are marked by aggravations and remissions - being however still continued and having no interval of perfect freedom from febrile symptoms. Continued fevers have been divided into Synocha, Synochus & Typhus. The existence of Synocha or pure idiopathic inflammatory fever may very reasonably be doubted and indeed is doubted by many eminent men in this country. According to the Ancients it was by no means an uncommon disease, but if so how can we explain its disappearance in the present day? It is said to be owing to the alteration in the mode of life. Pain is not a necessary symptom of inflammatory fevers - it is not even essential to local inflammations. Pneumonia may exist without pain. We must therefore not look to pain but to the disordered function of the part. - The symptoms of inflammatory fever are exactly like those of Rheumatic fever the crisis takes place on the seventh or eighth day. - the symptoms are quick and strong arterial pulsation - heat & rubescence of the surface of the body. Redness & flushing of the face -

There is no delirium in inflammatory fevers generally -

Continued fever of this country whether Synochus or Typhus is one disease and I propose to call them all as Typhus merely varying in degree the species are Typhus mitissimus - Typhus mitior & Typhus gravior. This is not the division of all writers on this subject - Bateman calls the

milder forms Simple Typhus & the more severe Complicated Typhus. He thinks the severity of the fever is dependent on the inflammation but it is not so, [illegible] are incorrect as the danger does not depend on inflammation & if this be present it is an effect & not a cause of fever. — Armstrong agrees with Bateman in the adoption of the terms simple & complicated fever but makes an addition which he calls Congested fever in this latter there is no reaction. the skin remains cold. — there is no return of heat — Pulse continues slow, Petechia form on the [illegible] Ecchymoses take place & Hemorrhages from the bowels occur. These congestive fevers are rather exceptions than forms of fever. —

Typhus mitissimus or Synochus. The first symptom is depression of mental energy characterized by dullness & confusion of ideas, incapacity of commanding attention, listlessness, at the same time or soon after muscular weakness comes on producing languor. The next symptom is a peculiar sense of producing continued restlessness this is called febrile anxiety, soon positive pain is felt in the back & loins subsequently in the limbs this is rarely absent in the commencement of fever. Dejection of countenance with paleness and collapse of fever — The countenance is in fact so peculiar as to be easily recognized by an experienced practitioner. The skin partakes of the debility shewn by the sensibility to external impressions especially to slight degrees of cold. [illegible] chilliness though increased by cold does not depend on this cause but can not be overcome by external heat & evidently depends upon internal causes and during the existence of cold there is no real diminution of temperature. The chilliness rarely amounts to shivering. Sometimes there is a well marked rigor at others scarcely even a feeling of cold. these symptoms are all referable to the Brain & Spinal Cord. The Circulation soon becomes affected, the pulse is more languid sometimes quicker than natural sometimes slower. It is always weaker & more [illegible] & then it becomes altered in frequency. The duration of the nervous symptoms is uncertain — varying from a few hours to some days. The more violent the symptoms the sooner does the transition to the next stage or that of excitement take place — After a time the pulse becomes fuller & stronger and generally more frequent than natural. The skin becomes preternaturally hot. — The previous cold was only a sensation but the increase of heat is absolute rarely however exceeding 98 or 100°. The heat is not at first uniform, as soon however as the circulation is fully excited the heat becomes universal. & the patient complains of violent headach* arising from accelerated circulation it may commence in the latter end of the cold stage

* This headach is diagnostic of the second stage of Synochus.

there is often only a sense of Giddiness. at this period the fever is fully formed. there is also increased disturbance of the Brain, greater mental weakness, certain functions of the Brain become more acute. there is acute sensibility of the Eye, Ear & Touch. Pulse though fuller & stronger is soft & not sharp. Fur on the tongue becomes white & thicker & may be ash coloured but is always moist & never dry, brown or black. — Sometimes instead of increased sensibility we find stupor and dullness of senses. When the circulation is fully excited the secretions become altered — mouth dry & parched. Tongue covered with fur. thirst. the alvine evacuations are also vitiated being dark coloured, fetid & increased in quantity. Urine high coloured & scanty, Skin dry & harsh. during this period the febrile anxiety increases & there is a good deal of pain in the back & limbs. In most cases where the disease is thus moderate, it continues for about fourteen days & in eight or ten days more the patient finds himself tolerably strong. — Sometimes about the period of Convalescence when we imagine our patient to be rapidly amending Death unexpectedly takes place this depends on complication with some other disease & occurs in old subjects labouring under other affections. — The crisis in the fever rarely occurs before the fourteenth day

Typhus Mitior The symptoms of this form of fever resemble those of the last subject however to some modifications. It differs from Typhus mitissimus 1st In the greater prostration of strength both physical & mental, in the alarming loss of muscular power & equally striking torpor of mind. 2ndly In the chilliness being greater & of longer continuance though rarely amounting to shivering — the succeeding heat also not so great. often not exceeding the natural standard. 3dly The febrile anxiety is greater, restlessness incessant. Face more pallid, features shrunk & collapsed. and more indicative of weakness — Pulse weaker & more rapid 4thly Pain in the head rarely so severe. dullness confusion stupor & giddiness more common than pain although some degree of pain is generally present. sometimes an insensibility consequent to stupor precludes the notice of increased insensibility. Pain in the back, Loins, & limbs is more severe 5thly When pain in the head is present it diminishes & disappears sooner When this is not present, the insensibility is increased & there is a transition into a state of stupor and Coma, the Eye is very dull often injected & suffused. This change of dullness into insensibility sometimes takes place as early as the second or third day. rarely so late as the 7th or 8th day 6thly There is little or no sleep. 7thly

Where Stupor & Coma do not occur delirium is more constant than in Synochus and comes on earlier often appearing as early as the 6th or 7th day it consists of low moaning, muttering incoherence. 8thly Muscular tremor & subsultus tendinum are more frequent in Typhus mitior & appear to be intimately connected with delirium there are also involuntary evacuations of urine & faeces. 9thly In the beginning the Pulse may not exceed 90, but as the disease advances it becomes weaker smaller & more frequent often in the height of disease as high as 120 or 130. In severe cases the pulse becomes weak & quick early – 10thly The tongue is always foul on the first or second day. – Often quite dry on the fourth day with apex & edges moist in a few days & as the disease advances it gradually becomes darker till it is black & chopped, the teeth at the same time being covered with Sordes. In some cases there is scarcely any thirst & it is often not intense 11thly In the early stages the skin is often hot as the disease advances the heat lessens in the latter stages the skin is cool & before death is below the natural standard the surface of the skin becoming dull dusky & sometimes covered with light brown petechiae 12thly Typhus mitior terminates earlier than Synochus if unfavourably as early as the 8th or 10th day. –

Typhus Gravior In fevers we do not find the different systems affected in one uniform degree sometimes one system is much deranged, while in others another system is most affected. Thus in one species of Typhus we find the circulating system chiefly disordered producing Delirium, dry brown and chopped tongue. – flushed face. injected eyes – violent action of the Carotid arteries, furious delirium, excessive muscular strength or violence the brain & its membranes are here inflamed with evident symptoms of Phrenitis – In another form we may have Stupor amounting nearly to Coma. with petechiae Ecchymosis Haemorrhage from the nose mouth or Bowels. Sphacelus of the Tongue lips and cheeks. –

This disease is now happily extinct or nearly so – it was formerly observed only in the most wretched lodging-houses where heaps of human being were often congregated together without any regard to cleanliness or ventilation, but owing to the improvement in the habits & morals of the community within the last few years no cases have been met with. This form of Typhus does not depend on any specific contagion but it arises indiscriminately in any form of Typhus under certain circumstances – or to be more explicit, the contagion from Typhus gravior does not necessarily produce the same disease –

Morbid Appearances after Fever. Brain The Arachnoid membrane is most frequently affected, it is either more vascular & injected – or thickened & opaque with effusion under it, where the fever is severe this membrane is often adherent to the Brain. The Pia mater is not altered in its structure but is sometimes more vascular than natural The sheath of the spine correspond in their appearance to the membranes of the Brain. – The Brain itself is rarely or never quite healthy. We commonly meet with vascularity of its substance either superficial or deep The surface when vascular exhibits more redness of an arborescent character from injection of the vessels. & the substance of the brain when cut exhibits a greater number of red points than usual. Sometimes it is softer sometimes harder than natural. Abscess is very rarely found in the brain thus proving that general inflammatory fevers rarely if ever occurs – In the cavities of the brain there is excess of secretion which is either thin pale & straw coloured or thick opaque & flaky. The fluid secreted under the membranes often contains coagulable lymph or pus. We never find effusion & increased vascularity together.

Thorax The mucous membrane of the bronchia is often affected with preternatural redness. – this redness differs from that of common inflammation in being darker like the difference between arterial & venous blood – This redness increase in proportion to the smallness of the bronchia, there is a preternatural thickening of the membrane and also increased secretion of mucus. and the vascularity of the membrane is less in a proportion to the bronchial secretion The Lungs are often engorged. Sometimes Pleuritis with adhesions is found. but these appearances are rare. – The Heart is soft & flabby. –

Abdomen All the abdominal viscera are more vascular than natural and much darker in colour. Several of the organs are always affected. The mucous membrane of the small intestines especially of the Ileum & Caecum is almost always affected. the changes are either simple vascularity or vascularity with thickening or ulceration – The simple vascularity constitutes the first stage of morbid alteration the Ileum & Caecum are often distinctly inflamed without any affection of the glandular parts preternatural thickening of the mucous membrane often exists – Ulceration of the mucous membrane and glands are the most frequent affection the glands are found diseased in various stages they may be merely enlarged, Pustular or Ulcerated. This ulceration may be extensive, superficial with irregular margins – when the mucous membrane is affected. but when supervening upon inflammation of the glands. the ulceration is limited & deep

with elevated margins & a ragged uneven surface. It is in this form that perforation of the intestine generally occurs. The ulceration extends through the mucous & muscular coats and the peritoneal gives way from Gangrene — In proportion to the extent in which these parts are affected is the inflammation. Enlargement & suppuration of the mesenteric glands. The Ileum is always deeper & darker and of a softer texture than natural. — Pancreas firmer — next to the Ileum and Caecum the Colon is the most frequent seat of ulceration. The mucous coat of the stomach is in some rare cases slightly affected & when it is affected it is nearly always in the Pyloric half. The liver is sometimes inflamed and thickened but rarely ulcerated. The Liver is seldom found diseased occasionally however it is found darker & softer than natural. —

Causes of Continued Fever. are divided into occasional or exciting and predisposing. The occasional causes are generally some morbid poison existing in the atmosphere generated by the decomposition of dead animal and vegetable bodies. Its nature is unknown. The atmosphere in which this morbid alteration is found abounds in Hydrogen & Carbon. but the disease is not attributable to the existence of these gases. The circumstances favourable to its production are a certain degree of heat & moisture combined and these circumstances scarcely promote the putrefactive process a peculiarity of soil seems necessary to the production of these effluvia as would appear from fever occurring only in particular places, those situations in which clay abounds appear to be favourable to the generation of fever while those lands in which a great deal of peat exists are rarely affected with Fevers. — We find fevers prevailing also in large towns where stagnation near the openings of public sewers or common sewers. —

It was formerly stated that marsh miasmata always produced intermittent fevers and that Typhus was generated by contagion. This is however evidently wrong since marsh miasmata often cause bad forms of Typhus & Intermittents are often produced in large towns by the effluvia arising from common sewers. That they do not always depend on Marsh or Miasmata is proved by the fact that persons in good health distant from marshes are affected by Fevers of every description and that among people confined in too small a space & separate from all persons labouring under the disease as in Hospitals Ships the fever also breaks forth. Under

these circumstances the term infection is used to imply the mode by which the fevers arise — here the disease is not conveyed from one to another through the medium of the breath of the patient but is produced by a contaminated state of the atmosphere — The breath of the patient cannot produce it as the Miasmata in Carbon and Carbon will not produce the disease — It depends on some unknown change in the atmosphere that may be produced by the effluvia arising from ill conditioned persons & slaughter wounds — in crowded wards where the ventilation is not free — & this is perhaps one of the most powerful causes of fever effluvia when the exhalations from the bodies of fever patients are confined in a small space

Epidemic fevers depend on a peculiar state of the atmosphere and as long as an atmosphere of this kind continues so long will the fevers continue and when the atmosphere changes the fever will subside —

Dr Cullen has divided disease into two classes. Those dependant on a state of diminished excitement or asthenia & those arising from increased excitement or sthenia. During sleep the property of excitability accumulates in the system but is dormant. Now suppose a case in which there is over excitement to know

that this is followed by depression and languor so that this division reduces almost every disease to the Asthenic class, all of which diseases are to be treated by Stimulants. This will lead practitioners into much error for according to this theory Fevers are diseases of diminished excitement, they arise from debilitating causes & they possess characters arising from & consisting in a want of action - and if this opinion be correct - all fevers may be cured by Stimulants. but both reason & experience are opposed to this. The debility is an effect and not a cause of Fever, besides all fevers are in the commencement attended by excitement. We allow that fever is preceded by debilitating causes. - but these do not produce, they only predispose to the disease. There has been much dispute as to the nature of fever. Clutterbuck states that fever consists in Inflammation of the Brain - Broussais says that it is nothing more than inflammation of the intestinal canal. - If such be the case why make any distinction between Fever & Encephalitis or Fever & Enteritis? But they have confounded Symptomatic with Idiopathic fever.

Allowing that in most cases of fever Inflammation & Ulceration of the intestines do exist. this is an effect & not a cause. If it was a cause the inflammation and Fever should be at their acme together, but this is not the case for at the termination of fever the intestinal glands are often in a state of simple enlargement. While we find Inflammation & Ulceration in a high degree in cases which have proved fatal in an early stage. This is however very important as an effect of fever. for the intestinal inflammation often causes death - the state of the Bowels is known by tenderness on pressure over the right Iliac region. Diarrhoea consisting of evacuations in which there is much mucus mixed sometimes with a little blood - of a yellowish ochrey colour. Tympanites is more particularly observable when the glands have ulcerated. It is a symptom which does not occur till the latter stage. This takes place in particular parts for the following reason - the faeces are indurated & are retained for a long time in the Ileo-caecal valve - their presence here increases the existing inflammation which rapidly passes into a state of Ulceration the mucous & muscular coats being thus destroyed the peritoneal gives way from gangrene & we have faecal extravasation into the peritoneal cavity - next to the Ulceration it is most frequent in the colon - & next in the Pyloric half of the Stomach where the food is retained for a long time. The cause of the inflammation of the intestines is that there is a tendency to inflammation which especially attacks parts of loose texture as the Brain, Lungs, Spleen, mucous membranes &c, while the Liver whose texture is close & intimate - is rarely if ever affected during the progress of fever -

The peculiarities of fever are, the sudden & great failing of muscular power, the tendency to perform certain changes in definite periods - the dissimilarity of their causes - its great power of propagation these completely distinguish it from other diseases.

The doctrine of Humoral pathology supposes the fluids especially the blood to be first affected with the contagion from Malaria and that all subsequent affections arise from disorder of the circulating fluid. But the first symptoms of fever are seen in the nervous system. the Grounds for believing that the origin of fever is in the circulating system are few. We always find a great want of coagulability in the blood, the clot not forming one mass but often being composed of several. The Serum is abundant & under the Coagulum we often observe a number of small Globules of the red matter floating in the Serum. - It is unimportant what system is first affected, for if the fluids are affected the solids must be. If the nervous system is affected the circulation will be subsequently disordered. They are so intimately connected that one system cannot be affected without the other. The most ingenious theory on the Humoral Pathology is that advanced by [illegible]. he says "suppose a person previously healthy is exposed to marsh miasmata & is afterwards seized with fever - it is said in such cases that the morbific cause acted primarily upon the nervous system - how the cerebro-spinal mass is secured from any such influence by being inclosed within the cranium & spinal canal. If however the influence is said to be exerted on the nerves through that part of the tegumentary membrane which lines the lungs, considering the functions of the organ it is more probable that the miasma conveyed by the respired air acts first on the blood & through it on the nervous & other systems." Dr Prout has ascertained that violent long continued exercise, fasting & depressing passions lessen the quantity of Carbonic acid produced by respiration - Now are not these usually given as the predisposing causes of fever. And do they not act by weakening the system & thereby diminishing its resisting power? - But if the above experiments are correct another rationale may be deduced from the fact that by lessening the excretion of Carbon, they tend to retain in the system a substance which ought to be eliminated from it. If into a system so predisposed a quantity of Malaria is inhaled & absorbed its introduction into the blood may cause such a change in the properties of that fluid as will be sufficient to produce those symptoms which characterise fever Dr Prout also ascertained that the quantity of Carbonic acid excreted from the Lungs is influenced by the hour of the day. & that in a uniform & regular manner. The greatest quantity discharged in a given time is about noon from 11 a.m. to 1 p.m. from which

hour it gradually decreases until it reaches its minimum about 8 p.m. remains stationary until 3½ in the morning when it again begins to increase. Should these results be verified on a large scale they will tend to throw light on that singular periodicity of exacerbation & remission which obtains in hectic & intermittent fevers.

In my opinion J.L. Fever consists in reaction of the vital powers from the irritation of some positive stimulus - this morbid stimulus whether contagion or malaria is the exciting cause of fever & the predisposing cause consists in the susceptibility of the system to receive impressions from this exciting cause. This susceptibility is greatest in a state of weakness. Thus every fever ~~[illegible]~~ proceeds from some irritating cause and in the commencement is accompanied by irritation. from this it follows that Fever cannot consist in debility alone - it may be accompanied by debility but the debility is an effect & not a cause of fever. There are some fevers in which there is no preternatural reaction but torpor & oppression of the system throughout, these are called by Armstrong Congestive fevers; this oppression may be produced by the sudden & violent action of the morbid cause on a system previously debilitated. We see a similar diversity of symptoms produced by the action of arsenic on the human body. In one instance it will cause severe pain in the Epigastrium violent inflammation of the Stomach - in another it will produce death without any Gastritis or any symptom of gastric irritation except slight nausea -

Terminations of Continued fever. there are three modes of termination 1 Resolution 2 other disease & 3 death - The termination by resolution is always known by a crisis. this may be indicated by perspiration, Sediment in the Urine by Hemorrhages especially Epistaxis - or by Diarrhoea. sometimes they terminate favourably by the formation of abscesses. - The terminations in other diseases are principally violent inflammation & organic diseases. The termination of fevers on critical days was first noticed by Hippocrates. they are the 3^d 5^th 7^th 9^th 11^th 14^th 17^th 20^th out of 168 cases. 107 happened on these days those which did not terminate on these days terminated unfavourably. , thinks a natural effort to terminate by crisis which failing death ensued. the five first days of crisis return at the tertian period, the three last at a quartan. The greater number terminate on the fourteenth day ~~&~~ next or the seventh day. If on noncritical days. then they have generally proved fatal. These critical days are now rarely attended to, ^[and are more seen in warm climates] The termination is generally preceded by a

paroxysm of fever more than usually severe. If therefore on the 7^th or 9^th day we find an exacerbation with delirium & cerebral excitement we must not thence infer that the fever is worse - since it is merely an effort of nature to throw off the disease under which the system is labouring. -

Treatment of continued Fever. The indications vary much in different works corresponding to the different theories which have been advanced. In modern times the cause has been sought either in some morbid change of the nervous system & has been treated by supporting the system others who attribute it to inflammation - by antiphlogistics & venesection. Cullen's indication is "to obviate the tendency to death" - those of the same school have proposed two indications 1^st To cut short the fever 2^nd where the fever cannot be arrested to support the strength till it has spent itself. They who suppose it to consist in diseased state of the solids & fluids suggest 1^st Ejection of the morbid poison from the system 2^nd Correction of the putrescent condition of the fluids. According to Dr S. our efforts should be directed to cut short the fever or eliminate the morbid poison from the system. To effect this we use certain evacuants especially Emetics which increase perspiration & act also on the nervous system. Tartar Emetic is preferable to Ipecacuanha unless there is Diarrhoea.

Formerly they endeavoured to cut short fevers by exciting perspiration & the hot treatment was had recourse to. the patient was confined in a close room, covered with heavy bed clothes & was drenched with stimulant diaphoretics cordials &c. This induced great weakness & local inflammations often occasioning fatal results. Sydenham first corrected this & introduced cool treatment. In the present day an Emetic followed by a brisk purgative & then antimonials for a few days seems to be the general practice for cutting short fevers. If this produces warmth & moisture of the surface in the cold stage it is useful it is also serviceable if it relieves the restlessness & promotes tranquillity. When the fever resists these means, we do not direct our treatment to relieve the cause, for we do not know the nature of the cause which appears to be a morbid state of the nervous system sui generis. If we did know the cause we do not know its mode of action. Fever then has a tendency to run a certain course - After the first few days our treatment is indirect not acting on the cause. It is directed so to sustain & control the powers of life that they may by their own action support

the body during the course of the fever. The principal obstacles to this sub-
-duing efforts are either excessive activity of the system producing local deter-
-minations of blood - or a debilitated state of the vital powers by which the
system is rendered unequal to the disease - the indications here then are
1st To control excessive action & 2 to promote healthy re-action.
In the stage of excitement the great difficulty is to do enough without doing
too much. There must be a plentiful supply of cool pure air, this tempers mor-
-bid heat, allays irritation & restlessness, promotes Diaphoresis & in some cases
effects a cure of fever. - Plenty of cool refreshing drink vegetable acids, an
open state of the bowels. Cold ablutions in summer tepid in winter.
As long as the secretions remain suspended the heat of body must continue
and vice versa. to reduce the heat next to cool air & cold drinks this will
be best effected by aperients & ablutions, the bath. Purgatives are use-
-ful in preventing a loaded state of the stomach & bowels which being
done the thirst is allayed their use also prevents Diarrhoea by pre-
-venting inflammation & ulceration of the mucous membrane of the bowels
they may perhaps prevent a putrescent state of the intestinal contents
Purgatives also act as decided & powerful Diaphoretics they promote
all the secretions & consequently diminish heat. The object is to pro-
-duce natural free daily evacuations - not hypercatharsis the production
of which is unfavourable Those cases treated at first with drastic purgatives
are always the most severe a combination of Cal with Rhubarb [illegible]
object is to prevent inflammation and the daily use of purgatives tends to
prevent inflammation by increasing the excretions & relieving determina-
-tions of blood to the head. Dr Gregory says that three good doses of Calomel
in the first nine days of fever combined with refrigerants & cold affusion will
break the course & severity of fevers. These reduce heat indirectly.
I Cold applied to the skin reduces heat directly thus prevents inflammation [illegible]
II lowers the pulse acting as a sedative Cold applied to the head or bowels relieves
it if there is a disposition to inflammation of these organs. - but if there is tendency
to inflammation of the Chest we do not use cold affusion III It produces Di-
-aphoresis. There are two ways of applying cold - by ablution or affusion
Cold affusion is the only means of cutting short fever. When the hot stage is
set in One or two gallons may be poured upon the body - the patient then will

dried & afterwards put to bed. This may be repeated three or four times
a day, if the heat & fever be re-established. Rules for use There must be no
sense of chilliness - heat of surface above the natural standard - from 98° to 104°.
There must be no profuse perspiration present - In full grown subjects ablution
is more convenient than affusion & is most commonly performed with vinegar
and water. This is inferior to affusion but reduces morbid heat - often the [illegible]
promotes rest - sleep & perspiration. Where there is Catarrh or Pneumonia
this must be used cautiously

Fevers accompanied & connected with a specific eruption.

Variola - Varioloid - Rubeola Scarlatina &c have their origin from specific
contagion. There is a great difference between these disorders & skin diseases
in general. Willan & Bateman place them all together & arrange them ac-
-cording to the eruption. The principles of classification in Cutaneous affections
are founded on their external appearance - but this mode of arrangement
is incorrect with regard to specific diseases
1 Efflorescence is variable & inconstant - thus papula become converted into pustules.
2 Eruptions of the same appearance are of different nature & require different treatment
3 The eruption sometimes changes its form, in its regular progress.
4 Eruptions of different kinds are constantly found mixed. papula with
macula their causes being the same.
All the forms are not externally marked sufficiently to determine their nature
as in some pustules & vesicles. This classification has no reference to the
cause or nature of the disease. One rational & practical ought to have refe-
-rence to those points of the disease which modify the treatment. We know the
causes of Exanthemata they are specific and determined causes and these
eruptive fevers never arise from any others (All other Eruptions except the
Syphilitic arise from various causes.) They also present one uniform
regular progress & train of appearances until they arrive at maturity
are accompanied by a peculiar fever corresponding with certain
appearances of the skin. The order ought to be Specific febrile diseases
The genera may be named according to the external appearances.
In these kinds there exists a tendency to affect internal parts, particularly

the serous & mucous membranes – thus Scarlatina has a tendency to affect the serous membranes – producing Dropsies – and there is always some affection of the mucous membrane of the throat. Variola has constant tendency to affect the mucous membranes. Rubeola is also always attended with sore throat, Bronchitis &c Confluent small pox sometimes attacks the throat & always affects the stomach & intestines is this a specific affection of these parts? It is always more intense when the eruption on the skin is not free & vivid. This has led some to suppose that the eruption takes place internally & is of the same nature with that on the surface of the body. This tendency to affect the mucous membranes forms a part of the disease – if sore throat be not present in Scarlatina the patient is not exempt from subsequent contagion.

Variola has two varieties. Variola discreta & Variola confluents

I Variola discreta presents in its first stage continued or intermittent fever white tongue, Epigastric pain & tenderness, Bowels either constipated or purged, burning heat of the skin & in adults perspirations there is dulness and sometimes Convulsions. Second stage On the third or fourth day small red points appear on the face, neck & breast afterwards upon the upper extremities, trunk, & lower extremities. The eruption which is papular is complete in 24 hours. but not quite perfect till the end of third day when the fever subsides; the pimple becomes a tubercle & subsequently terminates in a pustule with a circular base & red areola accompanied with pain & burning heat. About the fifth day, the base expands. the apex of the pustule becomes distended with matter at first pellucid then white & opaque the fever is now consentaneously renewed. Tumefaction takes place about the eyelids face & hands and throat and there is a pit in the centre of each pustule. On the 7th or 8th day of the eruption neither fever nor tumefaction are present the pustule burst On the 9th day a black point or scab is observed in the centre of the pustule. The crusts form & desquamate till the 14th day when the disease is generally removed.

Treatment. The fever is always of an inflammatory nature and usually

comes on between the 7th and 14th day after exposure to contagion when small pox is epidemic it is in warm damp weather which is therefore a predisposing cause of the disease. It most frequently attacks the young

Prognosis will be generally favourable in young children, when there are frequent and violent convulsions, excessive pain in the head, delirium coma & excessive swelling of the throat during the maturation fever, the prognosis will be unfavourable The occurrence of Convulsions in the first attack of fever foretells a confluent form.

Indications in the first stage is to render the fever mild. – to effect this the same treatment will be necessary as in continued fever and it is sometimes necessary to bleed – but this is not generally the case – Opium must be given to relieve the Convulsions, cold to the head. & warmth to the feet. When the Epigastric pain & tenderness are great and accompanied by Sickness &c we must apply Leeches. The eruption to a certain extent depends upon the mild & moderate form of the previous fever

Indication in the second stage is to promote the eruption and here we shall find the Diaphoretic Saline medicine most useful – When the maturative fever sets in the treatment is the same but more energetic than in the first stage Convulsions sometimes return in this stage here we must again have recourse to Opium having premised its administration by bleeding

In the last stage Tepid ablution removes the itching which is almost intolerable If the tumefaction of the throat be great. ptyalism &c Leeches & Blisters may be applied with Acidulated Gargles & aperients.

II Variola confluenta. The different stages are more severe & less distinct than in the variola discreta perspirations are wanting. On the third day there is an eruption of pale papula becoming flat & coalescing filling sometimes with a pellucid humor & sometimes with bloody serum. There is no diminution but an increase of fever. The swelling of the face is greater than in V. discreta there is also more swelling of the throat in children Diarrhœa & in adults salivation On the Eighth day the pustules break a black crust forms then bran[n]y scales there is reason to fear the occurrence of following

1st Head There is delirium – Coma – subsultus tendinum & Convulsions

2d Thorax dyspnœa & cough –

3 Abdomen Hæmorrhagies – vomiting – Diarrhœa

4th Integument. Petechia - Ulcers - Anasarca - livid vesicles &c.

Organic Complications those of the V. discreta are inflammatory & are connected with the Eyes - Fauces - Stomach & intestine -. In V. confluens these parts are liable to undergo suppuration & ulceration We have also inflammation & swelling of the joints & severe congestion and inflammation of the viscera - sanguineous effusion into the cavities. All these symptoms tend to indicate unfavourable terminations.

Treatment. consists in cordials, Tonics, stimulant & antiseptics. In the first stage the eruption is tardy & faint our indication is then to expedite this eruption by warm baths, blisters & the administration of Wine.. In the second stage when the vesicles are filled with dark coloured Ichor, we must give Wine - Cinchona & if there be nervous symptoms Opium. We must always anticipate as much as possible the occurrence of typhoid symptoms & Dr. E. thinks that the best treatment throughout the whole course of the disease is to give Cordials, Bark & acid - with mild aperients. The fever at the period of exsiccation is for the most part of a typhoid kind, having perhaps previously been inflammatory we must now support the system by cordials & Tonics - if there be much heat of surface tepid solutions - slightly acidulous - Acid gargles may also be used to the throat. In fact the treatment must be modified in every case according to the complication. -

Varicella. Some forms of the disease do not prima facie appear to differ from Variola, but if minutely examined the pustule will be found spherical with a narrow base - not depressed in the centre. There are no symptoms preceding the attack or these are very slight. the pustules come out suddenly & universally over the body. there is no renewal of the fever nor generally does suppuration take place - it terminates on the seventh or Eighth day. The vesicles leave no mark. when they disappear and Exsiccation does not take place at any regular period.

The treatment will consist in diluents & mild aperients.

Varioloid disease. This consists of an eruption similar to that of small pox occurring in persons after vaccination differing essentially from that of Variola and Varicella. Some believe it to be a kind of Varicella - pustules being few in number, have sometimes a spherical or conical shape. they soon proceed to desiccation leaving scales which are succeeded by small spots. It has been said that it takes place only when small pox is prevalent. The course and fever of the eruption are regular. about the fourth day the inflammation and hardness around the pustule rapidly abate - Maturation takes place early and terminates in incrustation - the fever disappearing -

It thus resembles & differs from both Variola & Varicella - there is always a pit left which has a distinct cellular appearance similar to that of the Vaccine pustule - Again this disease will give to another person Variola and a person who has had varioloid is secure from the contagion of Variola.

Vaccination is not an universal & perfect protection from the occurrence of Small pox. Although it generally is - it certainly modifies the disease, so that there is scarcely one fatal case of varioloid affection known - The danger of an attack of small pox after Vaccination is much less than after inoculation

The treatment is the same as that followed in the Variola discreta.

Thomson

Report of Vaccine Institution.

Scarlatina is divided into three kinds S. simplex. Sanguinea & S. Maligna. The first kind exhibits slight febrile symptoms and on the second day a red eruption - a raised & red state of the papillae of the tongue, affection of the [illegible] It does not render the patient secure from another attack. The skin desquamates on the seventh or Eighth day. - Prognosis favourable -

Treatment acid - drinks - mild aperients &c.

S: anginosa. General Languor - rigors, generally redness and swelling of fauces - nausea - difficulty of deglutition - sometimes [illegible] the Epigastrium The fever and affection of the throat are permanent. after the fever has existed for a day or two small macula appear on the face.

their form is irregular inclining to circular of a highly vivid Scarlet colour never raised above the surface of the skin. disappearing on pressure. They are at first distinct but they afterwards coalesce, are attended by heat & itching the hands & feet and sometimes the face & Eyelids swell. About the 6th day the efflorescence becomes pale Pulse slower. On the 8th day, the cuticle desquamates in branny scales accompanied by perspiration diarrhoea & turbid Urine. Sometimes the febrile symptoms are more severe the rash appears later is less general & less complete than ~~Scarlatina~~ Scarlatina simplex and is less complete. The whole duration is longer - colour deeper. Swelling of the Tonsils & velum and Uvula with florid redness and in a very short time white flecks appear Aphthae which spread and sometimes coalesce voice hoarse - deglutition difficult and generally there is cough.

<u>Scarlatina Maligna</u>. is the most severe form of ~~the~~ disease. We have the usual febrile symptoms - dark livid flushing of tumefaction and lividity of the neck. Efflorescence paler & mixed with petechiae. Ulcers of the tonsils & livid appearance of the throat. Tongue swells & is tender, nostrils discharge copiously. The breath is fetid & there is a typhoid state of the whole system and invariably low delirium. When there is no eruption whatever it has been called Angina Maligna. The french practitioners are of opinion that there is no ulceration or Gangrene of the throat. They maintain that its pathological state is "the formation of a false membrane, and when parts are detached from the fauces & throat the substances there have been found natural & sound. They have called it "Diphtheritis" or "Angina. " and state it as an Epidemic affection - and that the same appearance takes place in the last stage of Phthisis. 1st Inflammation of the throat then irregular patches of yellowish white lymph which extend and unite together. Others agree that it frequently happens that this membrane extends to the larynx & trachea producing Croup. Dr E. has observed that the majority of fatal cases of Scarlatina that he has seen have died with symptoms of Croup.

<u>Treatment</u>. Acid Gargles. Chloride of Soda the French recommend Caustics & small doses of Calomel. When there is difficult & painful deglutition leeches and blisters applied externally. Aperients during the fever. Cold affusion at the commencement & afterwards cold ablution and refrigerants - reducing

The cause of the ~~livid~~ appearance of the throat according to the French is the commixture of blood.

the heat renders the subsequent weakness less. As soon as the eruption and fever have ceased - we may commence with the bark & acids.

The dropsical affections accompanying & following Scarlatina are Anasarca and Hydrocephalus the latter rarely occurring without the former is very dangerous arising from suppression or imperfect development of the eruption and occurs during the disease. When Anasarca occurs in the 4th or 5th day, the irritative fever - elastic state of the skin. occasional recurrence of Gangrene &c. shew it to be of an inflammatory kind.. The Indications are to <u>re-excite</u> the suppressed perspiration, and to get rid of the fluid. This will be done by Digitalis. Acetate of Potassa - Liq Ammon Acet. & cold ablution or Diaphoretics calomel & if there be symptoms of Cerebral Oppression. Blood letting &c.

In the <u>treatment</u> of Scarlatina maligna. Purgative & blood-letting are objectionable. we must give - Cordials. Wine & Acids as antiseptics - Opium stimulating Gargles of Capsicum. Myrrh or decoction of bark with an acid these clear the throat. -

<u>Rubeolae</u> begins with languor lassitude headache. Sternutation. Efflorescence redness of the Eyes - sometimes tumefaction of the Eyelids. hoarse hard & dry cough these precede the fever for some time perhaps 8 or 10 days. Sometimes the eruption appears on the 4th or 5th day & it is sometimes later in the same order as the two last diseases. It appears as red spots or points elevated above the skin & grouped together in a semilunar or crescentic form - sometimes they are more diffused entirely covering the skin. On the 6th or 7th day the eruption becomes pale and on the 8th or 9th day forms into branny scales. The desquamation takes place rapidly. Fourteen days intervene between exposure to the contagion and appearance of the eruption.. Diagnosis between it & Scarlatina - it comes out in papilla & is of a crimson colour. we have no raised surface in Scarlatina & no projection of the papilla of the tongue. There are catarrhal symptoms, no or very slight sore throat.. It is generally an unimportant disease, free from danger except from the accompanying inflammation of the Eyes, nostrils, lungs and pleura. There is always subacute inflammation of the Larynx & bronchia when the eruption comes out the Catarrhal symptoms increase in severity but

it is after the subsidence of the eruption that severe inflammations are most
to be feared. – Hydrocephalus & Phthisis sometime follow.
Treatment We must endeavour to reduce heat by acids & mild aperients
and if the cough be very troublesome give Syrup. Papav. or Mist. Mucilag.
If inflammation supervenes we must bleed from the arm give
cathartics, antimonials and apply leeches to the Chest. If there be
pneumonia. The cough is sometimes severe without symptoms of
inflammation when a Blister to the Chest & Sinapisms will be useful.
Measles generally terminates in Diarrhoea which must not be
checked unless violent. When Phthisis occurs after measles it is always
the result of inflammation (principally in Scrophulous persons) Dr [illegible]
has remarked that Phthisis comes on quickly after measles & runs its course
rapidly. – he mentions 7 cases who died in a month. – We should
treat it with Chalybeates & Wine combined with milk diet.
The eruptive diseases come on and disappear in a ~~[illegible]~~ regular [illegible]
and at regular periods of fever which is sufficient to distinguish
them from other Skin diseases.

Inflammation may arise from a peculiar condition of the blood
from the fluid containing an excess of fibrin. The buff in this case is
not the effect of local irritation – but depends merely on a plethoric state
or a disposition to congestions in different parts of the body. On the
inflammatory condition of the blood would appear to depend various
inflammations especially those of serous membranes & the articular
surfaces of joints. The effusion found on the surface of serous membranes
bears much resemblance to fibrin. The inflammation of [illegible]
[illegible] is often preceded by fever before the local pains make their appearance
It often happens that venesection from a large orifice [illegible]
the disease as though by diminishing the mass of the circulating
fluid we diminished the inflammatory state of it. When bleeding
cures acute Rheumatism, at each subsequent bleeding the buffy
coat becomes less apparent & at length disappears altogether. But if the
treatment by bleeding is unsuccessful the buff continues though the
coagulum diminishes. As to peculiar principles in the blood causing
inflammations we are warranted in believing that the introduction of
morbid substances into the blood will produce inflammation and these
in particular parts as in Small-pox &c. The contagious principle is carried
into the blood & produces the disease. The infiltration of substances into the
cellular substance is sometimes the primary element of the disease – thus some
inflammations are at first essentially gangrenous – a septic and putrid
principle being first generated. –
Inflammation consists in Irritation or Vascular excitement, congestion
and infiltration of lymph into the tissue. In external inflammation
Irritation is observed first. congestion & infiltration subsequently. In inter-
-nal inflammations Congestion is primary & irritation secondary. While
in Malignant inflammation infiltration is the primary cause.
Internal Inflammations. To the condition of the blood may be referred
many inflammations. This altered state may be produced by ardent
Spirits – Wine. high living. all causes of specific inflammation & irritation

as Cancer Scrophula & Gangrenous dispositions. Many are not exposed to the influence of cold in producing inflammation." by suppressing the perspirable matter & retaining it in the blood. Many vitiated or depraved secretions retained in the system become absorbed and cause alteration of the blood as depraved bile causes depraved Gastric juice. The causes of irritation and inflammation in the Eyes fauces or alimentary canal are Mechanical or Chemical. In urinary passages as Lytta, turpentine, copaiba. Irritating vapours producing pneumonia. Injuries by blows, falls fractures &c. The causes producing increased action of the arterial system followed by congestion and as violent exercise - excessive use of stimulants & those in Fevers. inflammation happens in those parts most liable to congestion & the organs most frequently congested are those in a diseased state at the time or which have been diseased previously. The parts most liable are first the brain & spinal cord next the soft textures of the alimentary canal. - then the lungs & heart and lastly the cutaneous system. —

Hæmorrhagies arise either from the exhalent orifices of vessels or from the rupture of vessels & are therefore exhalations or extravasations of blood. Hæmorrhages are active, passive or mechanical. & the symptoms differ much according to the situation - so that they possess no common symptom except loss of blood. Hæmorrhage usually take place suddenly & violently without premonitory symptoms. Whatever be the nature of the hæmorrhage both local & general symptoms usually succeed it differing according to whether it be active or passive. It is attended with symptoms of congestion. The general symptoms are those of plethora - Immediately on an attack of hæmorrhage there is generally shivering. Pulse becomes frequent, full & sometimes hard. paleness overspreads the face & immediately afterwards the pulse becomes small & weak, the limbs are affected with tremors sometimes with convulsions. there is always preceding anxiety in excessive hæmorrhage. We should here attend to the precursory symptoms the nature of the blood & manner in which it was lost. it may have come guttatim or rapidly & in gushes. it may be compact & florid or pale & serous. - red or black. Active Hæmorrhages occur in young robust subjects of sanguineous temperament from active exciting causes. as Excesses in diet - violent exercise. ^before they occur, it is febrile symptoms

pain in the head. full & strong pulse. after the existence of these symptoms, blood of a crimson or pink colour escapes violently compact & abounding in coagulum after this the inflammatory symptoms disappear and if the hæmorrhage be great debility may come on. - Active hæmorrhage may occur in less robust persons. but from causes essentially active. - The passive form arise from excessive evacuations, long watching, anxiety of mind. & depressing passions in a frame feeble & exhausted. - The blood escapes without any febrile symptom and is generally black abounding in serum. Mechanical causes are two - first Plethoric state from congestion of the vessels. it oozes out. These hæmorrhages take place generally from membranes of loose texture as mucous membranes sometimes the mechanical fulness is the cause of serous exhalation - at others of hæmorrhage. - Second cause Impeded circulation consequent on diseased heart. may cause hæmorrhage in the brain lungs or alimentary canal. Obstruction in any ~~part~~ organ may produce hæmorrhage. Enlarged liver & spleen. the former may cause hæmatemesis & hæmorrhage from the hæmorrhoidal veins or we may have extravasation which most frequently occurs in the brain & lungs. The term apoplexy of the lungs is misapplied as it means loss of sensation & voluntary motion. sometimes a deposit of coagulated blood takes place in the liver brain or lungs. The ancients believed that hæmorrhage always proceeded from rupture of a vessel. Dr E. has seen rupture of an arterial vessel. We must generally consider hæmorrhagies as symptomatic. Congestion up to a certain period resembles inflammation. —

Diseases of Secretion. are of various kinds - Increased with serous, mucous or sanguineous discharges. called profluvia or fluxes. - increased with retention as in Dropsy of the cavities. We may have also perverted secretion in any or all of the organs. -

Profluvia. - fluxes. are of two classes. those from the membranes & those from glands. I The nature of those from the membranes are serous mucous or sanguineous II Those from secreting organs as Incontinence excessive urine. Diabetes excessive & depraved. - Ptyalismus &c. - All profluvia may be acute or chronic - acting upon the organs from whence they come may exhibit several appearances. 1 They may be natural or paler than natural 2 There may be discoloration of tissue or intervals of natural tissue intermixed with dark patches 3 Sanguineous congestion 4 Alterations of texture are rare. Morbid appearances slight compared with the effect.

Profusion may occur without any inflammation. The exciting causes are 1st some irritation in the substance of the membrane. 2nd Some irritable or excited state of the whole nervous system 3rd from sudden or gradual suppression of some other secretion. they may arise from absorption of a collection of fluid in any part of the body - as when dropsy disappears in diarrhoea or diuresis the Glands. Wherever secretion takes place alteration in its quantity or quality may occur thus bile, perspiration, urine &c present great alteration in quality. These are probably referable to some alteration in the qualities of the blood itself.

Disordered secretions retained in the system give rise to Dropsy of which there are three species. 1st active Dropsy. 2nd Passive or atonic Dropsy & 3 Dropsy of an apparently specific kind. . Active dropsy takes place in perfect health in robust persons. from ~~various~~ active causes. - comes on suddenly. attains its acme quickly & is attended with irritation as pain & heat in the part. Abuse of ardent spirits is the most frequent cause - sometimes it arises from suppression of some habitual discharge as Hemorrhoids. Amenorrhoea &c. Another cause is absolute plethora without symptoms of excitement. The secretion in these cases is greater in proportion than the absorption. —

Passive dropsy occurs in debilitated habits. - Oedema occurs in paralytic limbs. Dropsy comes on also at the termination of all chronic diseases especially in persons who are ill fed - whose food is fluid. - The debility produced by habitual drunkenness is often followed by Dropsy. - the quality of the blood is deteriorated & the coats of the exhalent vessels are weakened. the absorbents may also act with diminished power. — There is a peculiar form of Dropsy depending on alteration of the natural secretion, of long continuance, returning rapidly after tapping consisting in the surface of a serous membrane being changed from an exhalent to a secretory surface this I shall call Idiopathic Dropsy it takes place slowly. — according to the view the serous membranes in dropsies of the cavities & the skin in anasarca are converted into secreting serous surfaces. Absorption may go on. but this is not in a ratio according with the secretion. In this form of dropsy the serous membranes become thicker & more dense than natural & their internal surface is rugous. Sometimes there is alteration of colour. being interspersed with patches of dark matter. In other cases the membranes are covered with vesicles. In chronic Oedema we find the cellular tissue much thickened. Are dropsies the effect of inflammation? Dr. Smith not. Inflammation cures dropsy it changes the condition of the secreting surface instead of increasing secretion. Do we not excite inflammation of the Tunica vaginalis for the cure of Hydrocele. The effusions occurring in Encephalitis Pleuritis & Peritonitis which consist of serum mixed with pus or coagulable lymph are not dropsies. What then does dropsy consist in? Increased secretion does not necessarily implicate inflammation - we may have increased flow of tears without inflammation. The liquor amnii is not produced by inflammation. It is called "Secretory irritation" & pain does not necessarily imply the existence of inflammation. —

Beside these three divisions. there are two other forms of Dropsy. Dr Bright advanced an Opinion that they often arise from renal irritation - or from inflammation of the liver - occasionally also from diseased lungs. going on to organic change of structure. In the diagnosis of these cases we find a great quantity of albumen in the urine rendering it coagulable by heat - but the urine is often found coagulable when no disease exists in these parts - this however is but a negative proof. Dr Blackall asserts that in inflammatory dropsies there is always coagulability in the urine & that these require bleeding & refrigerants. It has been proved that in many cases of acute dropsy the urine was not albuminous while in many passive dropsies coagulability existed. The diseased granular kidney of Bright has been found in a majority of Dropsical cases, the cause of its pathological condition has not been explained - Is it a cause or effect of Dropsy? Dr. S. thinks it is an effect produced by deposition of albumen in the kidney - the organ is sometimes tuberculated. The granular state has been said by some to be produced by incipient tubercle. It is very much like the cirrhosis of the liver & the granular appearance of the lungs supposed to result from albuminous deposition. tubercles consisting chiefly of albumen -. It is most likely owing to a depraved state of the blood -

Mechanical Dropsies caused by obstruction of the circulation giving rise to anasarca or dropsies of the cavities - Diseased heart produces universal anasarca. Diseased liver by obstructing the circulation produces dropsy of all the parts below the diaphragm we never have ascites from this cause without Oedema & we may sometimes have hydrothorax. Mesenteric disease frequently produces ascites by obstructing the absorbents. Another important recently discovered cause is obstruction of

the veins themselves by the formation of coagula - effusion of lymph - formation of fibrin in their cavities. Dr G. does not think that there is any diagnostic sign of this kind of dropsy. In many cases of dropsy which were cured but which died afterwards from some other disease - where the Vena Portarum or Internal Iliac have been found plugged - the collateral veins were remarkably enlarged - permitting circulation to go on. -

Diseases of Nutrition consist in excess of nutrition defective nutrition and perverted nutrition. 1st Increase of number in the particles of any solid body owing to excess of nutrition gives rise to Hypertrophy 2d diminution or defective nutrition produces atrophy 3d Perversion of nutrition produces structural changes - as Induration & Softening - the consistence of tissues being liable to great alteration. Several causes act especially on the glands causing increase or diminution of cohesion in them. These alterations often depend on morbid action - in Induration there is increased cohesion - in ramollissement diminished cohesion. Inflammation often causes these variations of consistence - but is not a necessary cause - indeed the state preceding softening is often directly opposite to one of inflammation. Dr G. thinks that inflammation is never sufficient to account for either softening or hardening. the inflammatory process alters the nutrition of the part & thus may produce either hardness or softness - but here it acts indirectly. Nutrition is altered in different individuals in different ways. & this state of the system is produced by other causes which give rise to deficient nutrition as low living &c. Dr G. is disposed to refer a great many cases of softening to a Cachectic habit. to old age - when vitality is low. to adults affected with Scrophula - Rachitis Scurvy and to the influence of Chronic diseases on persons of all age. want of good quality of the food - all of which causes may differ in degree. -

Perverted nutrition the process by which all morbid degenerations are produced may be said to consist in derangement of the healthy functions by which the natural parts are first formed & nourished. This will also explain the accidental production of natural tissue. All these morbid productions when once formed have a tendency to ~~multiply~~ solidify & organize and the natural tissues

developed in unnatural places fulfil the same functions as the same tissues in their accustomed situations. they increase in size by a process of interstitial nutrition, and though inflammation be present it is merely a remote exciting cause. - The differences in the structure of morbid productions rather vary with the materials forming them than in the process by which they are formed. -

Diseases of Function. All functional diseases arise from some disturbance of the nervous system. 1st Excessive innervation. 2d diminished innervation and 3d Irregular innervation. Excessive innervation characterised by increased sensibility. deficient innervation by diminished sensibility & Irregular innervation by spasms. examples of these diseases are observed in affections of the stomach.

Nervous diseases generally, are subject to the same divisions. The nervous system has a great influence over every disease. Inflammation is sometimes accompanied by symptoms of excitement. & sometimes by depression - or typhoid symptoms. sometimes it is asthenic having a strong tendency to putrefaction and it is very important in practice to notice carefully these states of the nervous system in disease. - Having now given you a brief outline of diseases of ~~structure~~ - nutrition & function we will proceed to consider the particular diseases of individual parts. & first then of the Head.

Head - the first class is diseases of Circulation & first order is Inflammation. Inflammation of the brain & its membranes which I shall presently endeavour to distinguish from each other. Cullen comprehended both under the term Phrenitis & thought that neither symptoms nor pathological appearances would diagnosticate them most other writers have also noticed them under the same head. Sauvages ... as characteristic of Inflammation of the membranes - the fulness. Violent headache, & delirium ferox. Inflam^n of the Brain headache and delirium mite. Sometimes they cannot be distinguished from being combined

but when existing separately as they may be diagnosticated and as they
present post mortem appearances very different — they must be considered
as distinct diseases —
The disease as formerly described by old authors. Symptoms Shivering with
intervals of lassitude & anxiety — rigors followed by heat restlessness and
irritability of mind — fancied appearance of objects flitting before the Eyes — high
spirits ungovernable laughter boldness of manner, Giddiness — confu-
-sion of sight — forgetfulness — increased heat & acute pain in the forehead
or occiput with throbbing of the temporal & occipital arteries. Watchfulness
or unrefreshing sleep — frightful dreams called Typhomania — Complete loss
of appetite or anorexia — nausea & vomiting. — After the shivering there
is intense heat — Pulse strong & quick — delirium with violence loud
shouting — ferocity of manner supernatural strength with violent agitation
of the limbs — rash expressions & violent struggles to get out of bed — look firm
Eyes — fierce unusually clear or injected — Ears swollen — Face flushed and
congested — hearing acute affected by the least noise — if there is consciousness
he complains of Tinnitus aurium — mouth & fauces dry — little sense of thirst
urine abundant. At other times after violent headach with fever without
any previous delirium — the senses are lost — stupor comes on the patient is roused
with difficulty — there is restlessness & continual sighing — the patient writhes
through with agony — does not utter a word but applies the hand to his head
or lying on his back has lost all motion — picks the bedclothes or catches at
any thing passing before the Eyes. While pain is observed on one side of the
head by the application of the hand to the part — paralysis takes place on
the other. — Epileptic convulsions supervene & the disease terminates by
apoplectic symptoms. —

Meningitis. Inflammation of the membranes of the brain present three stages
1st stage indicated by pain in the head — increased sensibility of the senses and
excitement of the circulation 2nd stage that of delirium — as much or more
excitement — heat of the head — strong action of the arteries — flushed face — injection
of the eyes but no sense of pain in consequence of the delirium — the stage of collapse

by drowsiness & coma and the third is the fatal stage of meningitis
Hydrocephalus acutus is inflammation of the membranes at the base of the brain
and is unattended with delirium occurs in children
Acute Meningitis of the convex part of the brain generally occurs in adults it
~~usually~~ has some premonitory symptoms the manners of the patient become altered
morose & irritable absence & loss of memory indisposition towards his usual pur-
suits — the attack commences with cold & shivering followed by acute piercing
pain in the head occupying generally the forehead — sometimes the occiput
this is increased by motion & percussion which is considered diagnostic of Men-
-ingitis — Face sometimes pale — generally injected & expressive of pain Eyes
shining, injected, overflowing with tears — intolerance of light scintillations
& sense of bodies floating before them. — Lisping — noise like the falling of
waters — The mental faculties are irritable — answers questions briefly — there
is at present no delirium — there is high fever — pulse quick & hard — sometimes
small & contracted — great heat of surface thirst, Tongue white Sympathetic
symptoms come on nausea & vomiting without dyspeptic symptoms.
In one or two days — delirium comes on — generally delirium ferox the
patient rises up in bed — tosses his arms about — utters threats & speaks at
any one though the pain in the head continues he does not complain
Eyes insensible Pupils begin to dilate — Strabismus & double vision Tremors of the
muscles of the face with irregular contractions — Subsultus tendinum there
is sometimes general Epileptic convulsions — If there is muscular
twitching Strabismus or convulsions they are general. and are
not confined to one side — this is diagnostic — Soon after the delirium
drowsiness comes on with remarkable prostration of strength the crying
ceases. — Subsultus picking & catching continues as well as the convulsions
these affect chiefly the face & upper extremities — Pupils dilate and
become insensible drowsiness & deep sleep and lastly Coma at
this period serous effusion takes place in the ventricles. When Meningitis
occupies the base of the brain or interior of the ventricles there is a difference
in the symptoms — there is no delirium — intellect perfect — attention diminished

answers slow but correct. Drowsiness is a symptom present throughout the whole complaint – headach is felt but speedily superseded by drowsiness there is sensibility to light – without complaint & also with regard to sounds Coma at length comes on – The other symptoms are the same as those of meningitis of the convex portion of the brain –

Pathology of Meningitis.

Encephalitis. Inflammation may affect the whole brain or a portion or a part only which is the common form. When inflammation affects the leanest parts it is difficult to diagnosticate it from Meningitis from the symptoms being general. Symptoms. Pain in the head acute or dull not subject to exacerbations as in Meningitis, Increase of all the cerebral functions. Excitement of the intellectual functions – delirium agitation. Irritability. Spasmodic affections of the muscles & convulsions, excitability of the senses the ears become acutely sensible to sounds & the eyes to light – Headache, [illegible] –tions, Furious delirium, general pain, increased sensibility of the surface high fever, dry skin – Pulse differs from that in Meningitis being full hard [illegible] & quick Respiration irregular, frequent sighing – Eyes injected, [illegible] –tracted, Face flushed Tongue red & dry complete loss of apetite [illegible] and vomiting. The stage of Collapse now comes on with drowsiness – [illegible] of the senses – dilated pupils stupor & coma – Pulse small & [illegible] breathing stertorous slow & irregular – Extremities cold & all the symptoms of fatal apoplexy. –

Encephalitis may be thus distinguished from Meningitis – In the early stage with headache & excitement there is pricking, formication & sense of pain in the limbs – increased sensibility of surface – as the disease increases, there are tonic contractions of the muscles of the extremities & face – contraction of the eyelids requiring efforts to raise them. Corners of the mouth drawn forcibly upwards by spasm not from paralysis – in the paralytic stage they are drawn down. Spastic structures (not [illegible] convulsions) of the arms & legs – which are painful on extension being made – In the 3rd stage we have numbness & alternation of spasm with numbness – and ultimately complete paralysis this does not occur in Meningitis. In inflammation of one side of the brain we rarely find delirium – if both hemispheres be inflamed delirium is observed – Inflammation of the substance of the brain has four stages. 1st Excitement of the senses like that occurring in Meningitis. 2nd Tonic contraction 3d. Tonic contraction with alternate numbness ultimately passing into complete [illegible] 4th complete coma. — In Encephalitis the headach is always local – there is no delirium. – less febrile excitement – less intolerance of light & a tendency to drowsiness from the commencement. – In the early stage it is like Meningitis there is much excitement & formication on the opposite side. Spasmodic contraction or semi flexion with rigidity on the opposite side to that affected the corner of the mouth will be drawn up. that in apoplexy is drawn down. The contracted limbs will be painful. – Intellectual faculties not so much excited – the increased [illegible] of the senses is gradually succeeded by paralysis by which the eyes are closed. If the whole brain be inflamed the intellectual powers will be highly excited – if part only – there will be less intellectual disturbance –

Pathology of Encephalitis. 1. Redness of cerebral substance – on cutting it with the knife the surface exhibits numerous red spots points. injection of the vessels. There is also slight augmentation of density (moderate inflammation) 2 Redness is uniform not produced by streaks points or injection of the vessels forming [illegible] ~~the colour varies from a brick red to that of the dregs of red wine & blood~~ – the density is greater & the vascular injection very high (this intense inflammation).

3. Ramollissement, here we have a red colour varying according to the stage of the softening from a brick red to the dregs of red wine or Claret - generally around the softened part the characters of intense inflammation, the may be termed (between inflam^n with infiltration of blood & more or less disorganization) the 4 stage consists of purulent infiltration into the cerebral substance more or less softened - the pus at a later stage after being diffused become collected in a sac forming an abscess. adhesive inflammation takes place round the suppurating part & separate it from the sound structure forming cyst. - some days this process - the purulent collection will be surrounded by the characters of intense inflammation.

The first & second stage which may be called "Simple Inflammation"
The third stage is that of disorganization with infiltration of blood.
The fourth stage is that of disorganization with infiltration of pus.

The first & second stage is characterized by headach & convulsions of one or more limbs followed by temporary paralysis
The third stage or Ramollissement - is known by convulsions - Tonic rigid painful contractions of the extremities & face alternating with paralysis
The fourth stage or that of suppuration presents these tonic contraction followed by complete parlaysis and Coma.

There is no paralysis in meningitis - no delirium in partial Encephalitis convulsions precede the paralysis. Meningitis may pass into Encephalitis - in this case after the symptoms of meningitis, paralysis strikes one side & displaces the spasmodic affections. If meningitis succeeds Encephalitis the symptom on that side of the body primarily affected remains the same - & there will be convulsions on the opposite side without paralysis. Paralysis from inflammation differs from paralysis depending on hemorrhage by the febrile state and previous spasms - and by the slowness of its progress. In Paralysis from Hemorrhage the attack is immediate & not preceded by any febrile symptoms.

Ramollissement. presents several degrees 1st When perceptible only to sight 2nd When the alteration of structure is so great as to be perceptible to the sight and touch - 3 When it is perfectly disorganized and fluid nothing adhering but the cellular structure of the brain 4th The cellular structure on which the cerebral matter is based disappears also & there is perfect solution of continuity

The colour of the ramollissed part varies according to the degree. It is first of a rose red or brick colour - next purple - then brown. then yellow or greenish and lastly of a deep grey colour - sometimes the softened part contains effused blood at others pus infiltrated or collected.
Ramollissement is often symptomatic and arises from cerebral lesions in a consequence of all tumors of the brain - of Haemorrhagies in the brain. it should be kept in view in apoplexy. Individuals cured of apoplexy after a time present symptoms of a fresh attack & die - no fresh extravasation is found post mortem the cause of death is said to be serous effusion - this is sometimes found. Serous effusion has been found in a cyst after absorption of a coagulum. Death has in these cases been also attributed to solution of continuity from ruption of a cicatrix consequent on some former lesion. The cerebral substance surrounding in the cyst is yellow soft & disorganized causing the relapse. & When tumors of long standing cause inflammation & sudden death - Ramollissement is found around them.

Hydrocephalus Acutus. consists in inflammation of the brain or membranes at the base. it has three stages the first presents languor lassitude loss of apetite fever subject to remissions & exacerbations varying in severity in different cases. Pulse 100 sometimes 140. Skin hot, Tongue white, Bowels obstinately constipated. Vomiting excited easily by food or drink or merely by assuming the erect posture - pain either local or extending over the whole head - impatience of light pain occurring in sudden paroxysms. Sleep disturbed picking of the nose - grinding of the teeth &c. Second stage The pulse becomes slow irregular & unequal sometimes intermittent; in addition to the symptoms of the first stage there is constant moaning, restlessness - frequent screaming; pupils dilated becoming ultimately insensible - Strabismus. with double vision. The pupils have been sometimes found contracted - but these dilate on exposure to light. Sometimes there is slight delirium often sudden - soon lapsing into drowsiness. There are remissions & intervals of ease during which the patient is sensible Third stage The pulse again rises & becomes exceedingly quick 150 to 160 it has been seen even to 180 Coma gradually comes on. - Pupils insensible - often complete blindness. The hearing often remains perfect. Tremors - subsultus tendinum - Convulsions paley

of the Eyelids & Hemiplegia . Respiration stertorous. When the disease comes on with violent fever & strong full pulse. These cases though most violent yield most frequently to treatment. There is no one symptom which is diagnostic. The most certain are the pulse becoming slow & irregular after being frequent. Screaming during sleep. double vision - dilated pupil followed by frequent pulse - stupor & coma - the pain in the head in the early stage being sharp shooting & remitting. Vomiting from slight causes - and febrile symptoms without any great prostration of strength.

Causes of Meningitis & Encephalitis - They often come on in the progress of a febrile disease - continued fever. Scarlatina - Measles &c. They may succeed injuries by falls blows &c. The suppression of customary evacuations may produce them suppression of the Menses & lacteal secretion in females - of hemorrhoidal discharges &c are not unfrequent causes. They often occur in connection with Chronic, scrophulous, tubercular disease in other parts of the body as in Phthisis There are various other causes as mental excitement, stimulating liquors. Exposure to intense heat of the sun a frequent cause in hot climates. Irritation in the bowels - constipation - worms & dentition. —

What precedes Paralysis & convulsion

Hydrocephalus acutus depends on inflammation of the membranes of the base of the brain & of the lining membrane of the ventricles - but in an equal number of cases it has been found to consist in inflammation of the cerebral substance surrounding the ventricle. here we may not find effusion - how then do we account for symptoms of oppression & coma? We shall discover softening of the fornix - of the thalami - septum lucidum & other parts of the parietes of the ventricle this is sometimes found without any inflammation of the arachnoid lining of the ventricle - We know that tumefaction accompanies inflammation in this way the parietes of the ventricle may approach each other, or when the brain is softened the walls, lose their elasticity, fall inwards diminishing the cavity & thus account for the symptoms of compression

Treatment of inflammation of the brain & its membranes. The first indication in all these diseases is to treat them actively in their commencement as they soon terminate the Encephalitis in Ramollissement & Meningitis in Effusion. We must remember that the effects of pressure are immediately produced by slight effusion on account of the resistance offered by the bony walls of the cranium. We must bleed according to the degree of oppression - & according to the constitution and age of the patient. In young plethoric individuals whatever be the nature of the disease whether Meningitis - Encephalitis or Hydrocephalus - if there be high inflammatory symptoms free & repeated bleedings will be necessary. Venesection may be performed in children after four years of age if the inflammation be violent. In inflammations following violent external injuries when the cheeks are flushed - eyes shining & suffused, when there is much throbbing of the arteries about the head, with & delirium [illegible] full & repeated venesection will be necessary. It will be also essential when the disease is attended with high inflammatory fever - pulse frequent & full - thirst & great heat of skin. Inflammation of the substance of the brain - is generally unattended with so much fever little or no delirium - Pulse obstructed & slow no [illegible] from excited circulation but this will require a treatment equally active — Encephalitis runs its course quicker than Meningitis Ramollissement appearing sooner than effusion in Meningitis. It is also more frequently fatal. Our bleedings here will be smaller than in Meningitis but must be more frequently repeated. Supposing the first bleeding has relieved the symptoms, after a time these return we must bleed again & repeat it as long as there is turgescence of the face headache quick & full pulse and delirium - we may combine the general with topical bloodletting. The bleeding diminishes the quantity and impetus of the circulating fluid in the larger trunks while the local bleeding relieves the capillaries - Cupping the back of the neck. Purgatives may be used freely in inflammation of the Brain - they act by unloading the vessels & therefore diminish the quantity of blood - by promoting the secretions & allaying fever - and by acting as counterirritants upon the bowels - We use therefore in this disease drastic purgatives as Calomel Jalap - Scammony - Gamboge with Saline purgatives This treatment will be applicable to all cases of Hydrocephalus whether acute or chronic

Cold applied to the head is a powerful auxiliary & is indispensable as long as the scalp is hot - since by relieving irritation it diminishes the circulation - Cold drinks, refrigerants & sedatives will be necessary. The Nitrate of Potash is both refrigerant & sedative & is almost the only sedative we can use all the others being Narcotics. Digitalis must not be given in the first stage of Encephalitis Hyosciamus - Conium &c are contra-indicated. - Liquor Antimonii tartarizati is a sedative which may be used in nauseating doses taking care that it does not produce vomiting from the very commencement of the disease. Enemata containing Nitrate of Potash have been much recommended.

In Hydrocephalus acutus when there is somnolence, dilated pupil, strabismus, stupor and Coma we cannot employ active treatment. No venesection. If there is heat of the scalp we may apply Leeches & cold - but we must not use cold if there is not heat as it tends to increase the stupor. We continue the purgatives as they increase absorption - Local counter-irritants applied to the Head & Nape of the neck - are calculated to allay inflammation & promote absorption. We may also use Calomel, digitalis & Squill which increase the activity of the absorbents - still continuing the Leeches & purgatives.

Nearly the same treatment is applicable to the second stage of Encephalitis - Blisters Friction of Tartar Emetic over the Scalp - Tartar Emetic possesses an advantage over the Blister - when applied externally it does not excite the circulation which blisters do. The state of Spasm & rigidity of the limbs is indicative of Ramollissement - Is the administration of Mercury in this stage proper? Theoretically we should say not as it tends to soften all the parts upon which it acts. Dr Eccles thinks therefore that while we administer mercury in this stage (effusion) in Meningitis it should not be employed in Encephalitis -

In acute Hydrocephalus the blisters may be dressed with Ung[t] Hyd[r] &c and when Ptyalism is produced the disease is generally cured. But there is great difficulty in producing salivation - After the symptoms of Cerebral irritation are subsided and these are succeeded by oppression Coma & Convulsions we must abandon the antiphlogistic treatment as this will afford little & Stimulants such as Carbon: of Ammonia Musk & Camphor will be more serviceable. In hydrocephalus even in this stage the mercurial frictions must be continued giving at the same time Cordials internally. Dr Eccles is of opinion with Percival that when acute hydrocephalus is attended with Convulsions we should combine the Calomel with Opium or the Pulv: Ipecac: comp: and if it produces constipation give purgatives -

Apoplexy. signifies loss of sensation & voluntary motion - and may arise from various causes. Simple congestion Sanguineous extravasation. Serous extravasation. Ramollissement &c - The Apoplectic attack is usually preceded by symptoms indicative of deranged Cerebral circulation - as Headach giddiness sense of weight & fulness in the head. Violent pulsation of the arteries & confused noises in the ears. Often accompanied by Epistaxis followed by temporary relief & loss of recollection incoherent talking as in slight intoxication - by affections of sight, double vision temporary blindness - drowsiness & tendency to lethargy - indistinct articulation & other partial symptoms of paralysis. These may be confined to a limb or part of a limb - to the eyelids - muscles of face - & these may exist for a long time before the Apoplectic seizure.

Apoplexy appears under 3 forms I Congestion - Patient suddenly falls down - deprived of sense & motion lies like a person in a deep sleep - face flushed, breathing stertorous, pulse full & good frequency or slow. Sudden loss of consciousness. sometimes attaining complete Coma - with sometimes convulsions -
paralytic relaxation of all the limbs & In the course of a few hours every vestige of the disease will disappear leaving only numbness of the extremities in other cases the paralysis will remain for some time varying from a few days to two or three weeks. When cerebral congestion is very great it may be followed quickly by death though unaccompanied by haemorrhage. —

General symptoms are Nausea, vomiting faeces & urine evacuated involuntarily respiration more or less laboured rarely stertorous - violent pulsation of the temporal arteries skin hot often covered with perspiration. The rapid progress and rapid disappearance of the disease are its principal characteristics. Congestion is usually general sometimes purely local. The symptoms are in the latter case so like that it may be mistaken for those produced by slight haemorrhage there will be Paralysis, torpor or numbness of some of the limbs disappearing in a short time. Complete loss of consciousness from congestion is rare. Even then you may prove the existence of sensation by pinching the limbs, by applying stimuli to the nose or strong light to the eyes. In this form then - simple congestion - we do not find complete loss of sensation & voluntary motion nor stertorous breathing.

Pathological appearances. The membranes are more or less congested. The scalp & bones have in some cases been found red. Vessels & sinuses of the dura mater filled with blood. Surface of the convolutions deeper colour than natural. Cortical substance browner & pouring out blood. The medullary centre is congested exhibiting numerous red points from which the blood exudes. The large vessels principally veins completely engorged. If a patient previously affected with congestion from which he has recovered dies subsequently of some other disease no disorganization is found.

Hæmorrhage of the Brain presents three degrees two of which produce apoplexy depending on the extent of organic mischief they present different symptoms.

I Extensive central cerebral hæmorrhage. The patient previously quite well standing or sitting falls down suddenly and undergoes [illegible] more or less coma. He is at first quite senseless though apparently as if suffering from Syncope. He is at first deprived of sensation & motion for some minutes or even hours when coma comes on. The first symptom is a sudden & violent pain in the head said to be owing to rupture of some part of the brain which rupture is gradual & not instantaneous. This is succeeded by Syncope after a time the syncope being removed he recovers sensation and consciousness. The Coma comes on from a quarter of an hour to three or four hours after. When this is complete the Eyes are insensible pupils immoveable fixed & dilated sometimes unequally when one side of the brain is affected. Stimuli applied to the nostrils or loud cries in the ears have no effect. Pinching & pricking cause not signs of sensibility. There is complete loss of sensation & motion sometimes the limbs are rigid at others convulsed. General symptoms face red purple & tumified. Eyes appear as if starting from their sockets, lids livid. Pulse frequent strong full & hard. Respiration stertorous. Deglutition impeded. Fæces & urine passed involuntarily. In other cases the face is pale there is no stertor bowels constipated &c. Persons attacked with complete apoplexy generally die in a few hours rarely exceeding three or four days. When they do recover the disease was most probably cerebral congestion. Considerable sanguineous effusion into the substance of the Brain generally commences within the Ventricles. Post mortem the membranes will be found dry. Convolutions flattened & [illegible] a coagulum of blood is found occupying the whole hemisphere sometimes making its way outwards. The extravasated blood may not communicate with the ventricle. It may be situated in the centre of the Brain often in the [illegible]. The blood is generally found in a soft coagulum more or less black. The cerebral matter bounding the extravasation is generally torn of a [illegible] colour and almost fluid consistence. Shreds of cerebral matter are often found in the coagulum itself. When the hæmorrhage occupies one lobe or hemisphere it is situated on the side opposite to the paralysis.

II Moderate cerebral hæmorrhage. In the midst of health a patient is seized with loss of motion of one side of the body. He generally loses consciousness of external objects becoming comatose. Consciousness is sometimes however preserved. In this case it is not impossible to rouse the patient. Stimuli to the nose affect him. If we pinch the paralysed side an attempt is made by the opposite side to remove it from the danger. In some cases there is loss of sensibility. One corner of the mouth is drawn upward by muscular contraction. The other downwards by paralysis. Memory not entirely lost. The moral character of the individual undergoes a change. Sometimes the loss of consciousness subsides. When it terminates in cure the symptoms subside & at length disappear. In this degree paralysis continues for a long time in many cases during the whole life. In other cases the hemiplegia is a precursor of complete apoplexy. The general symptoms are various resembling those of the first kind.

Pathological appearances. External membranes injected. Laceration of the brain occupying the centre or circumference of one hemisphere never between the two hemispheres in the centre of the Brain. The coagulum of blood varies in size never communicates with the ventricle. After some days the coagulum diminishes in size the symptoms of compression yield & consciousness returns. The coagulum loses its black colour at a later period it decreases in size becomes yellow or saffron coloured & the fibres disappear. The substance round the coagulum increases in size. When absorption commences serum is found between the clot & the brain and finally there is nothing but serum in the cavity of the cyst. The density of the cyst has caused it to be considered as a true membrane. It is said that the parietes sometimes approach towards each other adhere & form cicatrices. Paralysis is sometimes continued after absorption of the blood & not the owing to diminution & absorption of some part of the brain.

III Trivial or small cerebral hæmorrhages - Symptoms Slight confusion [illegible] no loss of consciousness - sudden numbness & weight in one or more limbs of the same side - difficulty of laying hold of small objects, embarrass-ment of speech and difficulty of pronunciation - the Paralysis daily diminishes & is removed - it continues long enough to distinguish it from paralysis following hæmorrhage.

Organic characters. Death is rare - but may occur subsequently from some other disease or from a more extensive extravasation - the cavity is large but is generally found containing a coagulum. The cavity & blood undergo the same changes as in the other forms disappear & leave a cyst often find cysts filled with serum corresponding to the number of attacks which the individual has suffered. -

Diagnosis between congestive Apoplexy & that arising from extravasation In the latter case the patient falls down suddenly - he may have had premonitory symptoms as flushed face - lethargy - vertigo - but the attack is sudden, the Ictus apoplecticus is instantaneous the [illegible] tendency to lethargy loss of memory &c has occurred for some time this form is always seen in plethoric subjects. The loss of sensation & motion is complete - he may die - & if he recovers there is transient palsy.

IInd Form where there is moderate hæmorrhage. There is excessive pain in the [illegible] pale face, coldness of the body - sometimes slight convulsions - vomiting In some cases there is only transient loss of speech &c from which the patient recovers and in a few hours passes into a state of Coma.

IIIrd Form There is sudden deprivation of voluntary power on one side of the body & loss of speech This form is frequently the precursor of complete Apoplexy into which it soon passes. Sometimes however he recovers the hemiplegia depends on congestion rapidly - sometimes slowly - imperfect hemiplegia may continue for some years and the patient generally dies of another attack of apoplexy.

Serous Apoplexy. The diagnosis during life is impossible. Some say there is a distinction. Dr [illegible] believes it to be the congestive form of apoplexy. The symptoms of one form are found in the other. Serous Apoplexy is said to be characterised by pale face - soft slow pulse - & its occurrence in old debilitated subjects - but these symptoms belong equally to some forms of sanguineous apoplexy. -

In other parts of the body serous effusion is not primary or sudden - not accumulating at once in sufficient quantity to produce active symptoms. The quantity of fluid effused bears no proportion to the symptoms exhibited being found in large quantity when the attack has been transient & in small quantity when the Apoplexy has been long continued. -

We often find extensive serous effusion in the brain without a single apoplectic symptom. Those cases in which we find congestion post mortem present the same symptoms premonitory & proximate - as those in which we find serous effusion. The effusion depends on congestion. Dr [illegible] positively denies the possibility of serum being effused so suddenly in sufficient quantity to produce apoplexy. - In apoplexy after suppression of the evacuations - Congestion takes place in the vessels of the brain and effusion of serum is a consequence.

If effusion in the substance of the brain, be considerable coma supervenes & according to its situation it produces hemicrania, paralysis of the lower extremities or of the upper extremities - When the effusion is in the Corpora Striata the lower extremities are paralysed - if in the Thalami Nervorum Opticorum - the upper extremities. Effusion into the Corpora quadrigemina induces convulsive movements - When effusion takes place into one lobe of the Cerebellum paralysis of the opposite lower extremity is produced. - Effusion into the Medulla Oblongata causes speedy death from paralysis of the respiratory nerves. Dr Marshall Hall on the convulsions accompanying Apoplexy states that lesions of the Cerebellum are marked by paralysis only - lesions of the Cerebrum by paralysis and convulsions. The two also occur in in lesion of the tuber Annulare.

If the extravasation be in the Corpora quadrigemina it produces convulsions of the opposite side of the body - if in the Medulla Oblongata & Medulla spinalis the paralysis is observed in the same side of the body. -

Causes. The predisposing general causes are Plethora - short stature with short thick neck - but persons of other & opposite habits are not free from Apoplexy

The exciting causes are Disease of the heart especially hypertrophy - excesses in diet. The recumbent position especially of the head be con- violent bodily exertions. Passions & intense occupation of the mind - abuse of Spirits. & use of Narcotic Poisons. Organic causes. The most frequent is rupture of some inordinately sized blood vessel in the substance of the brain causing extravasation. In the membranes - Meningeal Apoplexy.

2nd From rupture of one of the large arteries.
3 From rupture of one of the sinuses of the Brain
4 - From rupture of the vessels forming the choroid plexus
5 - From rupture of.
6 From Aneurism.

There is generally disease of the artery & this is most frequently ossification or rather calcareous deposit - the canal of the artery is then contracted or nearly obliterated in the diseased parts - this disease (ossification) is very frequent in the arteries of old persons and sometimes they rarely occurs in the veins.

Pathological appearances are not proximate causes. Whatever be the proximate cause the effects of each pathological change are the same. Dr. Q. thinks with the older authors that all cases of Apoplexy may be referred to pressure. Abercrombie considers the Brain an incompressible organ & states that the quantity of blood in its vessels is always the same. Dr Q. thinks that there may be more blood in one hemisphere ~~than the other~~ producing hemiplegia of the opposite side. Dr Bright attributes the symptoms of Apoplexy to interruption of nervous influence produced by ~~laceration~~ Ramollissement of the brain ~~[illegible]~~ but we have the same interruption in Apoplexy from extravasation as in Ramollissement and these patients sometimes recover - though after death a cyst is found. This will cause an equal interruption of nervous influence with softening. This cannot be the cause. & these cases are all to be referred to pressure Dr Q.

Prognosis. This should always be guarded & reserved. for some having most severe symptoms sometimes recover - while those which appear slight prove fatal. Never pronounce your Opinion in cases of Apoplexy before the Ninth day

within this period the patient undergoes danger from laceration - compression the chance of a fresh extravasation - inflammation caused by irritation of the coagulum &c. Cases of complete Apoplexy are necessarily mortal unless they arise from congestion. The danger attending hemiplegia does not depend so much on loss of motion as on the coma & stupor attending it - the loss of any one sense is a dangerous sign in Apoplexy - it is rare when loss of sight is experienced ~~that~~ effusion has not taken place into the ventricles. Loss of sense & locomotion are far more serious than symptoms produced by organic derangement such as nausea vomiting. Affections of the breathing - Urine - feces &c. Nothing is more deceptive in Apoplexy than the pulse. sometimes it is strong hard regular & of natural frequency till within a few moments of death. Irregularity and intermission of the pulse is rare but aggravates the danger. Respiration is very defective as a prognostic but when exceedingly quick the case is almost sure to be fatal. Involuntary evacuations are also dangerous symptoms though less so than loss of the sensorial function. Convulsions are dangerous symptoms - When attended with loss of consciousness the case is far more serious than when senses remain. However favourable the case may be we should never promise complete recovery. There is always imbecility of mind or body the memory is especially affected.

Treatment. The indications are 1st To prevent determination of blood to the head. 2 Where there is extravasation promote absorption 3 prevent the occurrence of inflammation around the Coagulum 4 Remove all remote & exciting causes & after these indications have been fulfilled the consecutive treatment will be to stimulate the sensibility of the paralyzed limbs

Bleeding - arrests the flow of blood to the head - prevents renewal of the extravasation and laceration - prevents the recurrence of inflammation around the Coagulum & also favours absorption - depletion favours absorption in the same ratio as repletion opposes it. It has been asked whether we should bleed from an artery or vein. It has been said that the arteries are mere tubes conducting the blood & are therefore passive while the venous capillaries take an active part in the processes of secretion & nutrition & in the production of inflammation. First bleed from the arm till we affect the system - till the face becomes pale. pulse softer. (V. S. in the arm is preferable to bleeding from the Ext Jugular as we are subsequently obliged to make pressure which retards the flow from head)

the bleeding should be repeated after short intervals as soon as turgidity of the
face - fulness of pulse & stertorous breathing return. At the same time we must
employ topical bloodletting - Appl. Cucurbit. cruenta. Hirudines temporibus [illegible]
aures. - Two Leeches applied to the Schneiderian membrane of the nose will [illegible]
more profuse bleeding than almost any quantity applied externally & have the
advantage of abstracting it more immediately from the Cerebral circulation
though we do not forget venesection we must not abuse it, it may be carried to [illegible]
Excessive feebleness from loss of blood is calculated to produce fresh extravas[ation]
The rapidity with which the blood is drawn is of more consequence than the quan[tity]
We should bleed freely, twice in the first twenty four hours. and the amount of
each venesection should vary according to the age & strength of the patient [from]
℥xx to ℥xl. - After this desist for a day - then bleed a third time - but do not
bleed a fourth time - till some time shall have elapsed perhaps several days, [after]
the third bleeding - local depletion will be preferable. We should never forget [in]
our treatment of apoplexy that the process for repairing injury to the brain takes
place from the ninth to the tenth day. & that during this period our object is to
keep the inflammation within its necessary limits - this must be done by local
depletion. The process of absorption continues after the extravasation for 1.2.
3 months before it is completed. We must not desist from bloodletting during the [illegible]
next to bleeding Counter-irritants affecting the alimentary canal are most [illegible]
hence we sh.d administer Drastic purgatives & stimulating Enemata Croton [oil]
is perhaps the best purgative we possess in Apoplexy. a few drops on sugar put into the
mouth will often reach the stomach in cases where deglutition seems impossible. [Be]
-side its action as a purgative it nauseates & in large doses acts as Emetic. The [illegible]
often produces no apparent benefit & the first decided improvement is observed after
active purging. - Purging favours absorption - diminishes the flow of blood to the head
and prevents serous effusion — Cold water - this is applicable to apoplexy [illegible]
depending on extravasation or congestion & may be applied by means of cold [illegible]
pounded ice in a bladder, or by a full stream of cold water directed against [the top]
of the head & received in a basin held under the chin while the patient is sitting. The [ap]
-plication of cold often relieves coma when all other remedies have failed. In some
cases this state is immediately removed, in others though the immediate effects be
slight yet by perseverance the coma after a time begins to subside. Its action may

be thus explained. It excites contraction of the internal as well as of the external
vessels of the head which by their constriction resist any further effusion or ac
-cumulation of blood in them. Another important injunction is Repose both
of body & mind. We should enjoin the vertical position - withdrawal from any-
thing which may cause excitement of the brain or senses - the patient must not attend
to business - must not be disturbed by noisy conversation or any thing acting upon
the sensorium. - Blisters should be avoided in the first stages of Apoplexy [except]
in those cases in which after free & repeated bleedings - copious purging [&c.]
the patient still lies in a comatose state. In these cases we may use Blisters, ru-
-befacients & frictions to excite external irritation. The derivation thus obtained
to the skin counteracts derivation to the brain. A question now suggests
itself. At what period should we cease from active venesection in apoplexy?
Active treatment sometimes removes Coma speedily. In other cases it will
be necessary to continue it for several days. In others the most active treatment
is ineffectual and yet the apoplexy depends on fulness of the Cerebral
circulation - Abercrombie relates a case of recovery from Coma of seven
days continuance. Our treatment would depend much on the habit of the
individual whether plethoric or spare. & by the extent of reaction following
the previous detraction of blood. If Coma continue after we dare not
repeat the bleeding. when the pulse is low. Turgescence of the face and headach
When Blisters have been tried without success. We have two remedies in our
power which were very successful among the older Authors Emetics and
Internal Stimulants. Emetics in the early stage of apoplexy especially if at-
-tended with extravasation would undoubtedly be injurious. In congestive
Apoplexy after V.S. has been followed up & Coma still remains a mild Emetic
may prove useful - by giving a force to the circulation & thus reestablishing
the natural circulation in the head. - The same may be said of Internal Sti-
-mulants. After the removal of Coma. we have two indications - the first is
prophylactic - to prevent the return of apoplexy the second is to remove the
paralysis. The first is effected by Privation from food & drink. enjoining
a milk & vegetable diet - forbidding use of ale or spirits - prohibiting bodily
& mental exertion. moral excitement - cautious exercise - keeping the head high
in bed. - Occasional small bleedings & issues & setons of the neck. As to Paralysis
we will now proceed to consider its several forms.

Paralysis implies a total loss or remarkable diminution in the motion [&]
sensation of a part. The voluntary organs can alone be affected with
paralysis. We cannot say that the heart is paralysed in Syncope or
the Lungs in Asphyxia but merely that their functions undergo a tempo-
-rary suspension. Some organs are partly under the influence of the w[ill]
& partly involuntary as the bladder & Oesophagus. These are sometimes
affected with paralysis. The cases referable to palsies are those in which [there]
has been Apoplexy or where the Apoplexy has passed off & paralysis is the prim[ary]
symptom. It sometimes attacks nearly all the organs essential to life calle[d]
General paralysis – when it attacks one half of the body vertically Hemiplegia [&]
one half of the body transversely Paraplegia when it attacks a single organ it [is]
called partial or local.

Paralysis [illegible] generally. There is sometimes loss of motion without loss of sensatio[n]
– loss of both motion & feeling – & occasionally though rarely loss of sensation witho[ut]
loss of motion. In cases where both have been lost we often find recovery of feeli[ng]
without motion. Increased & acute sensibility has been often observed in paralyt[ic]
limbs. The temperature of paralytic limbs has been said to be colder than heal[thy]
Abercrombie states that they have lost their power of preserving a medium temp[e-]
-rature & that their heat will consequently vary with the temperature of the atmo[s-]
phere in which they are placed. The state of the mental faculties varies, the com[mon]
symptoms are loss of memory of words & in speaking they will use the opposite wo[rd]
to what they intend. They retain proper ideas but are quite unable to express them[-]
-selves. Instances have been known in which though every word when speaking wa[s]
mis-applied the patient has been able to express himself in writing

There are four species of paralysis from affection of the brain I Extravasation of
blood of small extent combined or in defined cysts in the substance of the brain or und[er]
the membranes. II Local congestion III Ramollissement of a peculiar natu[re]
differing entirely from the Ramollissement occurring subsequently to inflammation
and analogous to Gangrene in other parts. IV. Acute inflammation of the brain
when it has passed into Ramollissement or Encysted Abscess–. Paralysis may
come on gradually from chronic inflammation producing induration
of some part of the Brain

I Symptoms of Extravasation Palsy of the opposite side with or without loss of

speech – with Coma which soon passes off – the paralysis continuing for a
long time even for many years. The paralysis from small extravasation is
a precursor of extensive extravasation. Another circumstance for consideration
is the probability of Ramollissement around the Coagulum often with effusion
causing death. In cases where we know extravasation by continuance of the
symptoms the recovery will be complete or incomplete according to the degree
of absorption

II Congestive Paralysis. If a sudden & formidable paralysis passes off
quickly & completely it depends on congestion the hemiplegia from this
cause is sometimes fatal and on post mortem inspection nothing has been found
but serous effusion. This effusion is not the cause of paralysis but merely the effect of
congestion previously existing

III Ramollissement. The symptoms of this form of softening are not very different
from those produced by Ramollissement after inflammation. Headach giddiness
partial loss of recollection – numbness pricking & formication in the limbs followed
by loss of power & sensation in one or more limbs – difficulty of expression – Complete
intelligence – Coma then comes on & Death. The symptoms are slower than in
paralysis from congestion first the tongue will be paralysed then one limb then anothe[r]
& we find that the paralysis first commences in the fingers or toes then attacks the fore[arm]
or hand &c. Pain in the affected limbs is a frequent occurrence. Rigid contraction
may occur though unfrequently if it appears early it soon disappears. Convulsion[s]
of the limbs are less frequent than in inflammatory Ramollissement. Sometimes
the sensibility in the affected limbs is altered being deficient, natural, or increased.

This species of Ramollissement is rarely observed under the age of 70 and is
generally connected with Ossification of the vessels of the brain it is often observed
in those who have had Ossification of the vessels of the extremities & Gangrene
of the toes. The colour of the brain is extremely white without any appearance
of vascularity often studded with dark petechial spots. The Ramollissement may
be superficial or deep in the first case the convolutions will be softened flattened
& compressed. When it occurs in the deep parts the Optic thalami, Corpora Striata
& middle lobes will be its common seat. It is generally of great extent, not
circumscribed as in inflammatory ramollissement. The softening gradually
disappears & there is no line of demarcation between the softened & healthy brain
Sometimes we find a number of ramollised parts & it is often combined with effusion
into the ventricle –

There are other Species of Palsy 1st from destruction of cerebral substance in consequence of external violence belonging to province of Surgery 2. Paralysis from cold. 3 from a local affection of the nerves. 4 from a want of circulation in particular parts of the body. – Beside these paralysis often arises from other causes from weakness & exhaustion – particularly from the debility produced by excessive drinking & excessive venery. In drunkards we find muscular debility with tremors. paralysis & jactitation. Paralysis often occurs in – – who use much mercury in painters from use of lead – Colica pictonum, from the employment of arsenic whether internal or otherwise. Sympathetic palsy from over-repletion of the stomach. worms &c. All these are referable to general affections of the nervous system. We cannot suppose any organic sensible disease in the nervous system when they can be so speedily removed. They generally occur in persons of nervous diathesis. –

Treatment of Palsy will much resemble that of Apoplexy. Sometimes there are no morbid appearances found post mortem to account for the existence of paralysis – these cases must depend on congestion. The great indication in the treatment is "to remove the cause" this being done the subsequent recovery is chiefly a work of nature assisted by art. Recovery after extravasation of blood will depend on absorption of the coagulum. Mercurials may be used after depletory measures have been for some time continued. The next indication is "to increase the sensibility & conducting power of the nervous fibres of the brain connected with the affected limb" this is done by both external & internal excitants. The external remedies will consist of long continued frictions with stimulating substances, Cantharides Camphor &c. harmful (Brush) Electricity, Galvanism constant exercise of the limb the best external stimulant is brush &c. to each spine &c. External stimulants may be used safely but must be often varied as the skin becomes habituated to them and by suspending them for a time we apply them afterwards with more effect – Internal Stimulants as Phosphorus and Strychnia. The latter is now a very fashionable remedy – but its few symptoms of inflammation & ramollissement around the extra-

-vasated blood are attributable to this medicine and therefore in all cases of extravasation producing palsy Strychnia is contraindicated. Other stimulants as Ammonia, Arnica, Camphor, require a long administration to produce recovery & it may be doubted whether the cure is the work of nature or of art. In cases of palsy especially those depending on congestion keep the system low & have recourse to occasional evacuants – these will render the use of stimulants safer & more efficacious

Local causes Immobility of limbs produced by Rheumatism & Gout. Here we have recourse to blisters, friction, warm baths, Electricity stimulants as Ammonia mustard – hot water impregnated with salt & these are often successful. In paralysis of the bladder contractility may be excited by using the Catheter – Lytta – Balsamic substances blisters to the Sacrum &c. In paralysis of the face from cold we have recourse to sudorifics, steam from hot water this may also proceed from inflam^n of external ear & parotid gland when it will yield to topical bleeding & blistering. Paralysis from affection of the nervous system generally as from the Lead, Mercury &c. will be considered at a future period. In paralysis from ramollissement might recommend tonics, nutritious diet & blisters

Diseases of Secretion. Abercrombie states that cases of delirium are produced by diminution of serous exhalation. Hydrocephalus Chronicus depends on an increased secretion from the arachnoid lining of the ventricles. There is generally a predisposition to the disease existing in the system sometimes however it arises from external violence. When arising from deficient conformation of the foetus in Utero it generally consists in effusion into the ventricles. When arising from accident the effusion is between the membranes the first symptoms are affections of the senses – the mental faculties are enfeebled – & the intellect becomes gradually weaker till it is quite lost. there is great heaviness & stupidity. the loco-

-motive powers are affected - the gait is tottering & as the disease
proceeds walking becomes impracticable - drowsiness comes on
with vertigo giddiness vacuity of countenance. In the course of
the disease the senses become more disturbed, there is strabismus
dilated pupil - constant itching of the nose. Smell perfect,
hearing low voice affected. articulation difficult, and at length
Idiotcy, the least pressure produces convulsions - the head cannot
be supported but hangs on the chest or falls about as the trunk
is bent, limbs bent & emaciated. The last symptoms are those
of compression - the patient is constantly drinking - Hunger -
bowels constipated and in the last stage involuntary evacuations. On
Examination p.m. The Cranium is found enlarged, face small - shape
of the head triangular. the base being formed by the top of the
head. This enlargement is rarely regular. If the disease has lasted
for some time ossification may be effected. the sutures re-unite by
small bones ossa triquetra or by membrane. the bones are thinner often
and flexible sometimes they are thicker. The skull in some cases
is of the natural size but of different shape being triangular with
the apex formed by the upper part of the head & the base by the base of the
Cranium. In congenital cases the Brain is generally imperfectly developed
sometimes distended by effusion into the ventricles causing absorption of
the cerebral substance. Sometimes serum in the arachnoid pro-
ducing compression of the brain. the fluid is usually transparent
sometimes sero-purulent.
<u>Causes</u> In infants. whatever impedes the growth of the bones of
foetus in utero would appear to <u>predispose</u> to it. The brain does not
acquire firmness in proportion to its age but remains as it was at
first, soft & tremulous like jelly. <u>Exciting causes</u> Injuries to the

head in delivery as from the use of forceps - contusions - & blows also
obstruction from tumors of the brain - by pressure on the vein
Treatment The congenital form is hopeless and should not therefore
be meddled with. Bandages have been advised to remove pressure
from the cranium & apply it to the brain - this produces fatal Convul-
Blisters, setons & Issues may be used. Tonics & medicines which pro-
-mote secretion & absorption as Squill Digitalis Mercury &c
Paracentesis Cranii has been practised but is now abandoned
In almost every case where cure has been attempted death has
soon taken place. This might be done where the effusion is
between the membranes. When resulting from external injury or
when this compression has not been maintained for a long time -
the cranium may be punctured. The diagnosis between effusion
into the ventricles & into the arachnoid - consists in the shape of the head
and affection of the senses.
<u>Chronic affections</u> of the brain are distinguished by long continued
and severe headach occurring in paroxysms. Sometimes acute
and lancinating at others dull - sometimes referred to one point
accompanied by throbbing. In the more violent forms the pain is
intense but with perfect remissions leading one to think it was produced
by dyspepsia, but the long duration & violence of the pain induce a
suspicion [redacted] though there is disorder of the stomach, the headach is
sometimes most intense when there is neither nausea nor vomiting. Strong
light, noise, exercise, or stimuli increase the headach, while in dyspeptic
headach - conversation, stimuli &c relieve the pain. If after treating the com-
-plaint with stimuli Tonics &c it was not relieved we should suspect organic
disease. <u>Treatment</u> We should improve the general health by nutritious
but not stimulating diet - fresh air - in case of tubercular disease the
removal to a warmer climate. The general indication is to keep the patient

low by evacuations, spare diet, issues, setons, avoiding excitement and removing congestions which perhaps produce most of the symptoms.—

Functional diseases of the Brain. Functional Headache and Convulsive diseases with Neuroses. The Symptoms of nervous diseases they generally affect motion, sensibility, sensation & intellect in various ways, tremors, convulsions, spasms, irregular movements, immobility of the limbs—pain sensations of every kind, hallucinations of the senses, insensibility, insanity, weakness of intellect & Hypochondriasis.— These disorders are chronic & generally periodical—affecting the general health little. Appetite nutrition & circulation natural. No fever. When the pulse is quick & strong it is always secondary. The symptoms are generally violent for the time but rarely of even dangerous. The cure is difficult they are of indefinite duration and in death from these disorders leave no traces behind them. Character of Neuroses—Chronic duration—intermissions, no fever perfect health—Violent symptoms of short continuance and the absence of organic injury.

Cephalagia or Headach. A severe pain in one half of the head is called hemicrania—when the occurs at regular intervals intermittent hemicrania. Headache is of two kind depending on the cause I. of a local origin in the head, or from affection of some distant part as the stomach & bowels. II From the condition of the system either plethora or anaemia.

Local causes, congestion of the brain, morbid affections of the head particularly Rheumatism affecting the temporal muscle, whole affections of the pericranium & bones from syphilis & lastly neuralgia of particular [illegible] nerves. Remote causes indigestible matters in

the stomach & intestine—morbid secretions worms & constipation all these except congestion will be treated of hereafter.

Congestive Headach arises from plethora or debility from determination of blood to the head or impeded return. Heat, spirits, excess mental application, ligatures impeding circulation—low position of the head, suppressed discharges, excessive hemorrhagies & discharges depressing passions—all probably act in causing headache by producing congestion—General or common plethora will not produce headach—great debility from profuse hemorrhages or discharges & protracted suckling often act as causes

Treatment That form depending on plethora will be removed by bleeding & the exhibition of purgatives—That from debility by Tonics, stimulants antispasmodics &c—

Perverted Nutrition gives rise to organic disease & accidental productions

Fungus of the Dura Mater. while it continues within the cranium gives rise to no symptoms of its presence—when exterior to the skull the beating of the tumor is synchronous with the pulse—compression upon it produces partial but not complete reduction & the symptoms of compression in this case are the same as those of compression of the brain—coma being induced by pressure in any direction. There is no enlargement of the tumor during the pulsation or dilatation so that we may distinguish it from Aneurism

Anatomical characters The tumor is generally found about the orbits and it sometimes consists of a network of vessels at other times it is fibrous with many vessels penetrating its substance

These tumors contract extensive lesions, frequently they eat up the Brain without disorganizing it making a hole from continued pressure—at other times they produce disorganization. The Causes are obstinate syphilis or contusions in infants scrofula It may be confounded with a tumor of the brain observed in children

Encephalocele which protrudes through the fontanelles is soft round & rather painful - forced within the Cranium by pressure but protrudes again; increased by respiration or cough when pressure is made in any direction Comatose symptoms appear this is not peculiar to childhood as wounds & fracture may produce it at any period - it is called Hernia Cerebri. It is stated by Martinet that Congenital Encephalocele is a tumor from the substance of the brain the covering of which is formed by the Scalp. The tumor from injury the dura mater is almost always thickened - and the remainder of the brain healthy.

Tubercles. are rare in adults & old people common in infants & very young subjects The symptoms are numbness pricking pain and insensibility of one or more limbs headache - loss of sight or hearing hallucinations of sense - Perversion - tinnitus aurium & eventually complete loss of sense. Obstinate vomiting sometimes occurs the strongest proof of the existence of tubercles in other parts of the body in connection with the scrophulous diathesis & age of the patient When found in the brain they present the same appearance as when occurring in other organs. They are rarely numerous often one only. Their form is oblong or globular sometimes one tubercle is found lobulated composed of many small ones.* It is rare to find them numerous disseminated & small - varying in size from a millet seed to a nut.. The exterior is often soft the interior being filled with cheesy matter. They are often enveloped in a distinct cyst - at other times they adhere to the brain. Ramollissement may take place around them & is known by the usual symptoms.

* most common size that of a pea. We often find diseased cephalo[illegible] - tracing their surfaces

Cancer The most striking symptoms are lancinating pains in the head passing down one or more of the extremities which become paralyzed - the slowness of the disease - the pallid cadaverous hue of the skin; the advanced age of the patient & the manifestation of the disease in other parts. It always occurs in old people

anat. Characters. We find a hard irregular unequal knotted tumor of various size - a yellowish colour or sometimes transparent. sometimes it is easily detached - grating under the knife. When far advanced the centre is whitish & soft.. The tumor may not be circumscribed but lose itself in the surrounding parts producing Encephaloid & Ramollissement.

Other tumors are found in the Brain viz Earthy & bony - Spicula of bone have been found in the membranes of the brain in old subjects giving rise to irritation & frequent convulsions - The existence of bony spicula have been said to cause Tic doloreux. Andral says that tubercle undergoes the process of ossification

Hydatids. The vesicles found in the choroid plexus are not real hydatids. These do sometimes occur - generally single & acephalocysts - those without heads. There are no diagnostic symptoms - the characteristics vary with the seat and are the ordinary symptoms of tumor of the brain coma - convulsions &c - When situated in the ventricles they cause convulsions & affections of sight. The most important diagnosis is in the early stage between pain in the head produced by organic disease & Chronic cephalalgia. This headach is long continued and exceedingly severe. it sometimes occurs in paroxysms of very intense pain. The headach is most severe when there is no disorder of the stomach & complained of and the patient cannot bear light noise or heat. These marks diagnosticate it from dyspeptic headach - & the diagnosis will be rendered more certain by the knowledge that the treatment for dyspeptic headach will not relieve this.-

The functional diseases of the brain have been called Neuroses & are characterized by insanity and hypochondriasis.

Epilepsy is a disorder of the brain unaccompanied by fever, principally characterized by convulsive attacks without sensibility great distortion of the whole face. the cheeks drawn up. sometimes drooped of the face. In some cases these attacks are preceded by premonitory symptoms - a sensation of pain - considerable heat or cold commencing or titillation in a part remote from the head - commencing below & the extremity of a limb & proceeding upwards towards the head of the patient & then gives a sudden shriek & the patient falls down insensible ... Or in some cases giddiness is the only premonitory sign. The chest is fixed, raised, almost immovable and seeming to obstruct respiration. Arms turned inwards. fingers shut. tongue frequently protruded & cut, frothing at the mouth - sometimes the teeth are fixed at other grinding. The head inclined to one side & the convulsions are more manifest on one side than on the other there is violent palpitation of the heart. The eyes are fixed & immovable sometime there is strabismus. The fits often terminates in a dull stertorous sleep & the patient awakes unconscious of any thing which has occurred. The frequent recurrence of these fits for about three or four years often produces Idiotcy.

It is most important to distinguish Epilepsia from Hysteria. The non convulsive form of Epilepsy consists in symptoms of visceral affection below the head thus the epileptic fall vertigo contortion of the head to one side & universally complete loss of consciousness. These are never felt by Hysterical patient Hysteria consists in an affection of the viscera - the globus rises from some part of the abdomen into the throat and then convulsions take place.

The loss of consciousness is rare in Hysteria & when it does occasionally primary. The movements are accompanied with heavy sighs sobbing crying & the limbs are drawn up & extended downward upon suddenly. The convulsions are much more general in Hysteria than in Epilepsy affecting all the muscles at once. In Epilepsy the eyes are convulsed - within their orbit & are open in Hysteria there is a slight trembling of the eyelids. The aura epileptica is a sense of heat the coming up of a part of the body they have been said to be owing to some organic change in the nerves from whence it proceeded. The irritation on the brain makes itself sensible in these remote parts of the nervous system - Dr B thinks it more a symptom than a consequence. When the fits are over the person falls perfectly well.

Epilepsy has been classed into species by different authors by Cullen into Cerebral. Sympathetic & Symptomatic as when tumors or any other disease of particular organs exist. Worms &c. Dr Eccles divides it into Symptomatic depending on some local cause and Epilepsy depending upon affection of the whole body as when there is Plethora &c. The causes of the Symptomatic form are irritation of the nervous system in infants. - affections of the stomach from poisons &c teething - pregnancy - presence of tumors

The causes of Epilepsy of a Sthenic character are full habit. habitual excesses - violent exercise - exposure to the direct heat of the sun - stopping of critical discharges. Causes of an Asthenic form are hemorrhagies excessive of any description violent purging. Fear and terror are generally the most frequent

The Prognosis is to be formed by the cause. There are very few cases in which you can promise a cure. Those depending on symptomatic or local affections are most easily cured.

Those cases of Epilepsy occurring after the age of 20 are very seldom

cured. The more obstinate the disease is to cure the longer is the interval between the paroxysms - those of hereditary cause are in-curable

Anatomical characters. If the patient has not been affected with Idiotcy or paralysis, we never find any regular or organic alte-ration in the brain - Whenever the patient dies in a fit, we find general congestion of the whole vessels of the Brain & its membranes When the patient is affected with paralysis the post mortem appea-rances are Induration of the medullary portion of the brain with a dusky appearance and general injected state of this substance Sometimes however we have softening instead of hardening and we find inequalities on the surface of the grey portion - also a marbled appearance with induration or softening and other traces of chronic inflammation. Sometimes tubercle - Cancer or cyst has been found but is only an exciting or oc-casional cause.

At the commencement of Epilepsy there is no sign of Congestion it comes on gradually & as it becomes manifest stertorous sleep & convulsions. It is the Epilepsy which produces the congestion and not the Congestion which causes apoplexy When the pa-tient dies in a fit it is from Asphyxia. The proximate cause of Epilepsy is yet unknown.

Treatment The two principal indications of treatment are I To remove the exciting cause where it is practical II To obviate ner-vous irritation. Where it depends upon Sthenia or plethora bleeding may be used but caution must be used as bleeding will produce asthenic epilepsy. In weakened and relaxed habits bleeding predisposes to it. Purgatives must be used steadily and frequently to keep up continual irritation in the bowels and this will sometimes produce a cure - drastic purgatives of the ...

If worms are the cause Oleum terebinthinae with Oleum Ricini &c. In Over repletion in children Emetics, purgatives - warm bath &c may be administered

Aura epileptica tie a tight bandage around the limb from which it proceeds Issues or Setons

You are to allay in this case irritation by Sedatives antispas-modics and Tonics. This treatment may be used at the com-mencement of Asthenic Epilepsy The two latter are preferred especially Metallic tonics. Nitrate of Silver is one of the most fashionable remedies of the day but from its unknown action it is exceedingly dangerous as Gastritis Ulcerations with perforations of the coats of the Stomach have been found after its use - The Oxydes of Zinc both Oxyde (gr II to V) & Sulphate (gr I to gr III) and those of Copper are very good remedies - Cuprum Ammoniatum gr II to V with purgatives has produced many cures. When the fit returns periodically arsenical solutions have been advised We must always pay attention to obviate inflammation of the brain in these cases - Light vegetable diet - pediluvia - Warm baths the application of cold to the head Leeches when there is congestion Occasional blood-letting with the use of Cathartics & finally Setons All moral causes as mental affections should be carefully removed.

Hysteria. comes on with heat & pain in the Epigastrium after symptoms of restlessness - an immoderate fit of laughter &c and a globe or ball rises up from the stomach or some part of the ab-domen into the throat producing a sense of suffocation the pulsation of the heart is strong. the abdomen hard & tense - the patient falls down suddenly with a violent sigh or shriek insensible to stimuli, sometimes they are sensible, after attack they recollect what has passed.

crying or loud laughter and convulsions supervene. They throw themselves about. strike out their arms kick & often leap up suddenly. the Hands are open or if closed are easily opened. The eye does not start but seems composed as also do the muscles of the face. Hysteria affects the large muscles as those of the trunk – There is constriction of the larynx and the patients always apply their hands to the throat – and roll about from one side to another ^moaning & shrieking^ The fit generally terminates in an excessive flow of tears or an immoderate paroxysm of laughter & profuse limpid urine*

The disease occurs in females between the ages of twelve & twenty five. It is also said to attack men depending on constipation.

Causes When hereditary it depends on a highly excitable nervous temperament The exciting causes are those connected with the Uterus, love; reading romances – Nymphomania disappointment in love – excessive or irregular menstruation Those who are subject to it from disorder of the catamenial function are most generally affected with it immediately after the menstrual period. Many causes are of a debilitating nature such as amenorrhœa – dysmenorrhœa – Leucorrhœa Constipation

Prognosis The earlier in life it takes place the more violent the cause & the more difficult the cure

Treatment Bleeding is frequently useful in that form of Hysteria occurring in plethoric subjects more particularly if there is retention of the menses – Ammonia – Fœtid gums – Valerian – and may be joined with Tonics. Milk & vegetable diet – quietude – We must depend in our treatment on Mineral Tonics – as Zinc or Iron. exercise in the open air – change of air & scene – with a free and easy state of mind.

* The premonitory symptoms are headach sleeplessness contractions of some few muscles. Pulse small unequal irregular, alternate flushes, cold or heat of extremities

Catalepsy. Is a complete loss of strength without fever and a peculiar inertia of the muscles, – with loss of sense the muscles are not stiff The eyes become fixed and the limbs may easily be raised but are pressed down again with more difficulty. They most generally attack all at once

Causes nervous plethora. Exciting causes are those of solemn religious devotion – deep love, – great disappointments – fear or terror affections of the Uterus it most frequently attacks females.

Diagnosis is the total loss of sense and the state of the limbs

Chorea Sancti Viti. chiefly attacks children of both sexes between ten & fourteen years old. It frequently attacks one leg only which cannot consequently be kept quiet the hand – when affected to the disease if lifted to the head is often pulled down again.

It makes its approach with a variable apetite sometimes voracious at other very bad – Constipation, swelled abdomen Languor & dulness there now comes on twitching of any part of the body but the patient is perfectly. In some cases they will spin round like top – at one time the patient drags his limbs slowly & then suddenly begin to run

The disease occurs in children who have been ill fed – debilitated & of nervous diathesis

The French maintain that there are particular nerves in the head which allow the limbs to act simultaneously and this is supposed to exist in the Cerebellum which is disturbed by some morbid deposit

Treatment - This consists in the administration of Tonics with purgatives the mineral Tonics are the most efficacious such as the Oxides of Zinc, Iron & Arsenicum, - And as an external Tonic we use the Shower bath. Stimulants are also effectual in some cases as Electricity. Musk. Sometimes there are cases of Chorea which are attended with great Cerebral disorder - and which require Blisters Secale application of cold to the head purgatives & the use of Tartar Emetic both internally & externally

Spinal Meningitis. - is rarely confined to the membranes of the cord but generally extends to the membranes of the Brain there are two principal symptoms I General contraction of the muscles of the posterior part of the trunk so as to cause Opisthotonos. In inflammation of the membranes of the base of the brain the cervical part of the Spine is often bent backwards. II. Acute pain in the whole Dorsal region intense in one spot aggravated by motion said by some also to be increased by pressure. In Spinal Meningitis the sensibility of the lower limbs is retained, in Myalitis it is at first impaired and eventually destroyed. In Spinal Meningitis there is sometimes acute pain in the limbs with more or less stiffness tremors, Convulsion and paralysis - these indicate that the inflammation has been propagated to the cord itself. The respiration is difficult - Face injected - Eyes bright - thirst intense - Deglutition difficult pulse strong & quick - course rapid & termination fatal. It frequently terminates on the 9th, 11th or 13th day often as early as the 5th

Pathological appearances Redness thickening & effusion sometimes adhesion

Myalitis Inflammation of the Medullary Spinalis. has the following symptoms acute deep seated pain with a sense of burning heat in some part of the Spine less aggravated by motion than in Meningitis. Numbness with formication of the lower extremities (and fever) succeeded by rigidity - contraction & great pain in the limbs terminating in paralysis.. In the commencement of the disease the Urine & fæces are retained afterwards the evacuations become involuntary the paralysis sometimes affects motion sometimes sense - and sometimes both.

Paralysis often affects one limb only - passing to the opposite side & producing paraplegia.

Myalitis may affect the whole cord. though generally only a part When confined to the upper portion we have disturbance of the senses

and delirium paralysis & asphyxia. When in the Cervical portion there is rigidity of the neck, convulsive movements & the paralysis is preceded by numbness commencing in the fingers & gradually extending itself upwards. Respiration is difficult and performed by the diaphragm the intercostal muscles being inactive

When the Dorsal spine is inflamed there are tetanic shocks of the trunk in which the limbs do not participate, short hurried diaphragmatic respiration. palpitation – irregular action of the heart & asphyxia. Numbness and paralysis of the lower extremities involuntary evacuation pain in the lumbar region – with fever &c shew an affection of that portion of the spinal marrow.

The disease usually terminates about the 4th day but is sometimes as long as the 12th or 14th day.

Pott draws a distinction between paralysis induced by curvature of the spine and palsy caused by other disease – In the latter the muscles are quite flexible. In the former the muscles are rigid and always in a tonic state by which the joints acquire a stiffness not easily to be overcome

In Chronic Myelitis there is often no pain in the part affected. the painful state of the limbs exist long before paralysis occurs there is pain discoverable by pressure on the spinous processes of the vertebra but does not occur so often when the disease assumes the Chronic form as it does when acute; the patient may live for many years. The pathological appearances are the same as those observed in the Brain. There is rarely if ever recovery from the disease – our only means are palliative. The bladder must be emptied by the Catheter & the Rectum by purgatives & Enemata

When the dorsal portion is affected the breathing becomes laborious. When the cervical portion is inflamed the voice becomes changed.

Chronic organic diseases of the spine produce only one symptom till they cause compression. – The symptoms of compression vary according to the site & extent of injury when in Lumbar region they consist of pain formication numbness & paralysis – impossibility to fix one limb across the opposite extremity involuntary evacuations & finally gangrene in the part – when pressure exist in the Dorsal region we have difficult respiration – & in the Cervical – alteration of voice & speech & paralysis of the upper extremities we rarely observe pain or fever

One of these diseases is painful this is Cancer we must look to the period of life – the existence of Cancer in other parts – the shrivelled yellowish white appearance of the skin – marasmus &c.

Tubercles may be suspected if the symptoms occur in young scrophulous subjects labouring under tubercles in the lungs.

Caries producing Curvature presents symptoms of Meningitis & Myelitis.

Treatment If acute we must have recourse to antiphlogistic & topical bleeding – if there be much fever General bleeding – & Counterirritants If chronic: Topical bleeding by leeches & cupping as long as there is pain – followed by blisters, friction, issues setons and the daily use of purgatives. –

The pathological appearances after all mucous inflammation are same the mucous membrane is of a bright red colour partial or general. This may be arborescent - or in uniform patche. may be limited to the Trachea - or Bronchia - constituting Bronchitis or to the Larynx forming Laryngitis. When the minute Bronchial divisions are inflamed there is much dyspnoea - fever & great danger. One cause of sudden death is congestion of the vessels in the minute bronchia. We see examples of general inflammation of the minute bronchia in measles & scarlatina producing fatal results.

In chronic inflammation the colour of the mucous membrane is livid or purplish brown. as we see in chronic bronchitis there is also thickening this may take place in acute bronchitis but is only permanent in the Chronic form. - the thickening causes the sounds heard by the Stethoscope sometimes sibilus sometimes ronchus. Thickening may affect the mucous follicles of the Bronchia & Larynx simulating tubercles. Softening is found in acute inflammation particularly of the Larynx & Trachea. Ulceration follows it. We rarely find the Bronchia ulcerated. When the Trachea & Larynx are ulcerated the Lungs are generally ulcerated also so that we rarely meet with Laryngeal or Tracheal Phthisis. In these ulcerations one lung is affected corresponding to the side of the Larynx on which the ulceration is found. The Larynx may sometimes be ulcerated idiopathically the Trachea is rarely so affected, the Laryngeal ulceration is observed in brass founders &c

Phlegmonous inflammation of the Larynx or Angina Laryngea resembles the specific inflammation Angina Trachealis or Croup.

Angina Laryngea. occurs in adults & old men - resembles Croup is seen in two forms Acute & Chronic commences with symptoms

of common Catarrh accompanied by uneasiness in the throat some dyspnoea - & violent fever & small rapid pulse. the symptoms increase quickly acute pain, heat & stricture are felt low down in the throat about the thyroid Cartilage - Breathing short - painful & difficult with a harsh tremulous noise like Croup - sometimes like the rattle. Voice at first hoarse afterwards lost - frequent painful shrill cough. there is no membranous expectoration Pulse becomes exceedingly rapid the cough convulsive the patient gasps for breath exhaustion and suffocation follows. The cough occurs in paroxysms with intervals of comparative ease

This disease is attended with great difficulty of swallowing which is not found in Croup & is attended with high inflammatory fever.

Anat: Character. The inflammation extends to the Epiglottis which is thickened as well as the Chordæ vocales, the Glottis is further contracted by effusion - & here & there we find patches of coagulable lymph which adhere firmly. The inflammation extends downwards to the Bronchia & even air cells which contain pus. if the disease has been of long continuance we find infiltration of bloody serum. Inflammation of the bronchia & . is more frequent in Laryngitis than in Croup. The p. m. appearances then are - Redness - effusion of coag: lymph & infiltration of bloody serum.

Exciting causes - The application of cold directly or indirectly.

Predisposing causes are plethora and sanguineous temperament

Treatment - should be depletory. purgatives - Inhalation of warm water in the form of steam - also the steam of hot vinegar - large blisters to the chest &c

Bronchotomy has been suggested as a means of relieving the cough & dyspnoea but its application will depend on the seat & extent of the inflammation. If it extends to the Bronchia & we hear the mucous rattle or find pneumonia it will of course be inapplicable. If the inflammation be confined

solely to the Larynx and it be judged expedient that the operation be performed it should be done early. as it relieves the violent cough.

Tracheitis is known by the situation of the pain, mucous rawl &c.

Prognosis is very formidable not from the inflammation itself but from the parts which it affects

The treatment should be in the fullest extent antiphlogistic Early copious bleeding repeated according to the paroxysms of suffocation Blisters to the neck & neighbouring parts fomentation Cataplasms purgatives Mercury, Saline medicine & Antimony.

Cynanche Trachealis or Croup. The inflammation is here specific It commences either very suddenly or its attack at first exactly resembles that of a common Cold. Coryza. Sneezing. increased secretion from the Schneiderian membrane. & cough. This cough at first is becomes in the course of the disease hard & harsh and eventually resembles the crowing of a cock with high febrile symptoms the respi-ration is attended with a peculiar noise called the croupy sound attended with great oppression which does not take place till an adventitious membrane is formed - which if it be not expectorated will produce suffocation This is the second stage but these symptoms are not constant - the respiration is sometimes accompanied by a weezing sound and though the fever be still very great the patient may acquire a great degree of liveliness. in this stage the patient never lies on the back.

In the third stage remissions do not take place the dyspnoea is constant the cough no longer. — The patient now lies on the back from exhaustion, with great agitation & struggling for breath The face congested - cheeks swollen - lips purple - neck tumi-fied the pulse becomes weak - great sweats break out and death soon appears.

In this disease there is more languor & prostration of strength than in Cynanche Laryngea. There is not sufficient difference in the first stage in the respiration to diagnosticate one from the other. The only diagnostic mark of this disease is the expectoration of false membrane. —

Anat. Character. An exudation of elastic membrane which concrete on its first formation lines the whole tube. the thickness of the membrane is proportionate to the duration of the disease. It seldom obliterate the aperture of the Glottis On elevating the membrane the mucous surface beneath it is found red - but this redness is very slight often less than is found in common Catarrh. The character of Croup is less the in-tensity of the inflammation than its origin. The early period of life is predisposed to it and it frequently prevails epidemically and occurs when other Epidemics are prevailing especially those which attack Children. It frequently exists in Spring from the presence of East winds at this period as it is cold & dry - which soon dries up the moisture of the skin. Exanthematous diseases especially predispose to it.

Why does the disease occur so frequently in Children? - Because there is at this period a preponderance of albumen in the blood* and the glottis is very little developed, is much narrower & more easily closed. Croup has occurred in adults in Hospitals when the patients have been confined and the blood has become altered in its properties.

Treatment. Unless it is attended with great weakness as in Scar-latina or when the patient is very young we should have two or three bleedings. In doubtful cases it would be better to defer these. After

* Laennec says. It depends on disorder of the fluids generally since he has found albuminous deposits in other parts beside the throat.

Death takes place from insufficient respiration. it may occur suddenly from separation of a portion of false membrane. which completely closes the air pas-sages.

the Bleeding in adults Leeches to the throat may be very useful in disgorging the blood vessels - we must subsequently use aperients as Calomel & Saline purgatives - During the early period of the disease Blisters must not be applied to the part but at some distance. The indication of treatment is to prevent the formation of the false membrane. Calomel is administered to repress suppressed secretion and to separate the membrane if already formed this medicine should be continued till Salivation is produced or the membrane is expectorated. During the severity of the croup symptoms we find the most obstinate Constipation and when the bowels have been once freely opened then Calomel is almost specific. Dr Hamilton used Calomel from the first after having used the Bath. When the symptoms begin to yield the Mercury must be stopped. The strength must afterwards be supported by stimulants and Tonics.-

The free exhibition of Emetics produces very good effects in Croup. 1st They produce free diaphoresis 2nd they prevent the formation of the false membrane & 3dly after it is formed they promote the expectoration of it.- Warm baths are also of great service in Croup. Blisters must not be applied when the system is under the influence of Mercury as Sloughing of the part will frequently succeed their use.

When at the commencement of Croup we find a false membrane forming on the fauces & Pharynx, the treatment will consist in the application of Strong Caustics such as Honey & Muriatic acid Chlorides of Soda & Lime. Burnt alum blown into the throat &

Bronchotomy has been recommended in Croup but is more especially useful in Angina Laryngea if the operation be decided upon it should be performed as soon as possible the opening

into the wind pipe is made to gain time it allows the patient to breathe more freely & protracts suffocation - it ought always to be performed below the thyroid gland - Great attention should always be paid to the Bronchia for if the inflammation has extended to them the performance of the operation would be highly dangerous.

Œdema of the Glottis. which consists of serous infiltration is consecutive to other diseases as Dropsy & Inflammation. It generally occurs in Leucophlegmatic habits. The voice becomes altered & hoarse & there is constant expectoration. constant effort at deglutition & constant expiration. the act of inspiration is peculiarly difficult in consequence of the sides of the glottis being drawn inward - The voice becomes gradually more hoarse & at last is completely lost. The sleep is interrupted by a sense of suffocation.

Anatomical Characters The Œdema occupies the Larynx generally, there is thickening of the lining membrane - there is also softening which favours the serous infiltration. The mucous lining of the Trachea Larynx & Glottis is red. The Epiglottis is not much infiltrated - If the membrane is red the serum is sanguineous but if of a greyish red colour & the membrane is easily detached, the infiltration will be found to be of a sero-purulent Character.-

It is the consequence of Anasarca, Inflammation, Chronic and acute Laryngitis &c

The Prognosis is not drawn from the violence of the inflammation

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but from the situation which it occupies and is almost always fatal in the acute form death will generally take place in two or three days.

Treatment. Local & general bloodletting must be had recourse to with Emetics - purgatives - counterirritants &c

Cases of cure have been reported to have taken place by pressure on the tumor being made by the finger - The use of a gum-elastic tube has been recommended as a palliative

Tracheotomy has also been performed.

The patients seem to die of a slow asphyxia rather than any sudden stoppage in the air passages

There is a disease of infancy liable to be confounded with Croup

Symptoms. In the evening, night or morning the child is taken suddenly with cough, hoarse sonorous or wheezing, respiration hurried, pulse quick, skin hot. At the close of the attack the face is pale skin covered with sweat.

This disease is most violent in its commencement from the urgency of the cough. The attack may soon leave the patient and occur again on the next night. The cough is at first hoarse and dry - but becomes soft & expectoration of mucus takes place in the course of the disease.

The Diagnosis of this disease from croup presents the following marks

1 Absence of Fever and drowsiness.

2 Suddeness of its attack.

3 By the complete intervals which occur.

4 By the freedom from pain & symptoms of inflammation -

It is not very well known where this disease consists in ...

from the mucous expectoration it may be supposed to be a chronic or subacute inflammation of the

The treatment is the same as in Simple Catarrh.

Catarrh or Bronchitis. Is a subacute inflammation of the lining membrane of the larynx and Trachea and of the Schneiderian membrane of the nose. We very seldom find any sore throat in this disease

Symptoms. Hoarseness. sneezing redness of the conjunctiva increased sensibility of the Eye to light / Epiphora - nose at first dry afterwards wet with serous discharge - - Swelling of the Eyelids a good deal of fever - free perspiration - White tongue - thirst sense of chilliness succeeded by heat.

The disease terminates in an abundant secretion of mucus and in profuse perspiration. This is called simple Catarrh but there is a greater degree of inflammation which though occurring in the same situation is termed Bronchitis. It is characterized by a general dull pain over the chest - pain & heat under the sternum - dry cough. The difficulty of breathing is not the same as in Laryngitis. When the patient coughs acute pain and heat is felt under the Sternum with no expectoration, but in two or three days an expectoration of thready viscid Sputa is set up The severity of the inflammation corresponds with the viscidity of the Sputa

After 15 or 20 days the quantity of Sputa begins to diminish

The stethoscope in this disease detects a crepitating rattle. Respiration is heard over all the chest except at some points where for a

moment the bronchia may be plugged with mucus.
and the clear sound yielded by percussion distinguishes it & suspended respiration from pneumonia.

Anat: Characters The mucous membrane is red. The redness may be streaky & arborescent or may occur in patches there is also thickening of the membrane usually accompanied by slight induration — sometimes by softening. The redness is not general but affects certain points only

Bronchitis sometimes terminates in Pneumonia in which case the ob-struction of breathing becomes more urgent the sputa become thick and bloody. the fever high cheeks flushed &c

Sometimes when Catarrh does not terminate in two or three weeks it assumes the chronic form and after one or two months we observe the patient to lose flesh — the face becomes pale the appetite is lost — flushes of the cheeks & palms of the hands. the eyes are sunken — perspirations take place in the morning and the patient (if the disease be allowed to continue) sinks without the least alteration of the substance of the Lungs.

Treatment Although Catarrh depends upon inflammation of the mucous membrane of the bronchia — bloodletting will not be requisite unless the breathing is oppressed, there is great [illegible] coughing & bloody or suppressed expectoration. The general treat-ment is to give Diaphoretics as Ipecacuan or Lesser Anti-mony in small doses If we have recourse to bleeding this best topically.

In the commencement of the disease & when it is protracted Emetics will be found very useful they are absolutely necessary sometimes when the expectoration is so profuse as to threaten suffocation. Pediluvia, diluents the comfort

[illegible] of Camphor for the cough — Diaphoretics. Blisters & the inhalation of the steam of warm water.

Chronic Bronchitis. Characterized by cough — expectoration and scarcely any febrile excitement in the first stage The cough occurs at intervals & is either dry or accompanied with an expecto-ration of very small & rounded — dark grey — lead — or pitch-stained sputa.

But we often find this disease presenting frequent cough & great expectoration of a semitransparent lymph like the white of egg.

Whenever the discharge from the lungs arises from inflammation it is alkaline. Whenever it is a lymph like the white of egg it is acid which difference may be discovered by testing with litmus paper. The nature of the expectoration is a very good test of Chronic Bronchitis from other diseases.

The cough occurs in Paroxysms

The expectoration when profuse is puriform & the rattle by which Bronchitis is detected is very thin The sound is sonorous & hoarse & the hoarseness is proportionate to the mucus secreted. the less mucus, the greater noise.

If the Bronchitis has its seat in the extreme tubes we have a purring of the whole chest.

In that part of the chest in which the mucous rattle is perceived the inflammation is situated.

The respiration is often suspended in the part for a few moments owing to obstruction of the tube by thick mucus, but the respira-tion is soon restored the obstacle being removed by expectoration.

The stethoscope will assist us in our diagnosis between Bronchitis and Phthisis pulmonalis. If by the use of this instrument

we cannot hear pectoriloquy or the gurgling sound. Convers- breathing or absence of the respiratory murmur. we may supp- it to be bronchitis more particularly if the respiration is heard over the whole chest. Below the seat of inflammation & thickening dilatation of the bronchia may be produced by the violence & difficulty of coughing and the diagnosis will then be rendered very difficult as the stethoscope may convey to the ear a sound like pectoriloquism. In this case how are we to distinguish? by the general symptoms. If the patient has no accelera- -ration of pulse, no dryness of skin, no nocturnal sweats no emaciation, no puriform expectoration we may safely pro- -nounce that the disease is not Phthisis

Treatment When the disease is primary there will be very little alteration in the functions of the part
Blisters may be applied to the chest after which we may use the Ungt Antim. Tart. - this diminishes the mucus deflux from the Lungs. If it sets in with active symptoms we must use Sedatives & expectorants as Antimonium Tart. & Ipecacuanha

When the disease is confirmed we must adopt different remedies Stimulant expectorants as Ammoniacum, Galbanum, Squills Balsams, Decoction Senega &c These act by producing a new species of irritation superior to that by which the disease is kept up.
Emetics are said to cut short the disease when administered once or twice a week
Tonics must be used with ~~these~~ remedies, & of these the metallic tonics are preferable.

In the fourth class or diseases of function of the Lungs we enumerate Asthma & Angina pectoris.

1st Asthma consists in a spasmodic affection of the bronchial tubes and air cells of the Lungs. There are two kinds – One depending on disease of the lungs Idiopathic The Second on disease of other organ especially diseased heart Symptomatic –

Symptoms Pure nervous Asthma is periodical in its attack the paroxysms with intervals of health allowing the patient to resume usual occupation – The attack often commences with symptoms of disordered digestive function, Eructations, flatus in the stomach & bowels – sense of tightness & constriction of the chest Dry preternatural & urine. The paroxysm occurs generally at night or early in the morning the patient awakes with great oppression sits up or gets out of bed & is anxious to obtain access to fresh air, as the attack advances all the characters of severe dyspnoea come on the shoulders are raised neck & head thrown back – Respiration hurried noisy & accompanied by a sibilous sound from constriction of the glottis & bronchial tubes. – The respiration becomes mechanical & performed with fear accompanied with a troublesome & suffocating cough, the face is pale contracted & expressive of great anxiety & alarm. In symptomatic asthma the face is often livid tume fied & swollen the Stethoscope affords no diagnostic sign merely yielding sibilous & crepitating rattle, the pulse is sometimes irregular this always symptomatic of diseased heart. In pure nervous asthma there is no irregularity but merely acceleration of pulse. After the efforts of respiration have been thus violently acting for a space of time varying from half an hour to three or four hours the impending suffocation seems gradually to abate. Respiration becomes easier the cough less troublesome, expectoration tolerably free, the face

assumes a natural appearance & frequently an abundant discharge of thick highly coloured urine depositing a sediment forms the crisis of the attack – The paroxysms recur every night for a week or a fortnight. leaving twelve or fourteen hours during each attack during which merely slight dyspnoea is experienced. The return of the Asthmatic attacks is very variable sometimes ~~[illegible]~~ months or even years elapsing between them In some instances it is not periodical but accidental consisting of one paroxysm only accidentally excited as by exposure to an atmosphere containing Pulv Ipecac In most cases however the recurrency of the paroxysms continues for some time, when periodical & of long existence its returns are quicker & at shorter intervals & the attack may be brought on by very slight causes.

Prognosis The paroxysms of pure asthma are rarely fatal so that we may may always give favourable prognosis. It may cause by its long existence some fatal disease but is never fatal per se.

Anatomical Characters. Dr Eccles thinks there can be no marked appearance as the disease consists essentially in spasm of the bronchi. Authors state many & various appearances. In those who have died during the paroxysm great sanguineous congestion was found in the lungs. owing to the return of blood being impeded by the spasmodic stricture. It can be no cause – Pulmonary adhesions these can only cause dyspnoea and may be an effect of asthma which being constant produce slight Pleurisy Tubercles of the Lungs. Ossifications of the Pericardium. – Adhesions of the Pericardium, disease of the Aorta – Ossification of the Diaphragm – Ossification of the coronary arteries & ossification of the Cartilage of the ribs. Asthma does not necessarily require tubercle for its existence and these frequently exist without Asthma. How can tubercles cause periodical attacks of the

they are either the effects or are merely accidental productions. In old asthmatic patients no organic alteration have been found after death. Lately some also light has been thrown upon the subject by discoveries of alterations in the texture of the nerves. Ossification has been found in the centre of the pulmonary plexus, & in the diaphragmatic nerves. Andral found in the case of a young woman a cancerous disease of the phrenic nerves with enlargement of the glands in the anterior mediastinum. Organic alteration of brain has also been found near the origin of the Pneumogastric nerves.

Causes These are predisposing & exciting 1. Predisposing the most frequent is hereditary predisposition - it is most frequent at the adult period -, nervous temperament, moral affections, strong mental passions, all trades requiring strong muscular exertion or compression of the chest - or where dust is floating in the atmosphere & is inspired by the individual. A plethoric state of body, suppression of habitual discharges .. a gouty diathesis, excessive evacuations - long suppurations many of these are exciting as well as predisposing causes. 2nd The exciting causes are sudden & great variation of atmospheric temperature which are most frequent causes an Electrical state of the atmosphere always disturbs asthmatics - the depraved air of theatres & other crowded places. Respiring air impregnated with Pulv. Ipecac. has often produced asthma -

Treatment. Narcotics are highly useful in diminishing the frequency of respiration & relieving the spasmodic constriction. Opium Belladonna & Stramonium. all these may be tried in turn gradually increasing the dose as the system becomes accustomed to the medicine. Next to these Prussic acid has been

found most successful The Nitric & Sulphuric Ethers, Fetid gums as Assafoetida, Galbanum, Musk Camphor &c These have one advantage being expectorant & antispasmodic. When the attacks are quite periodical Quinine will often relieve and sometimes cure them. Dr Bree advocates the Subcarbonas Ferri - Sulphas Ferri & Sulphas Zinci especially in debilitated cases. Phlegmatic habits. Dr Wilson Philips extols Electricity but its operation is uncertain, the Galvanic pile is used. -

I would recommend Emetics. they not only cause vomiting & expectoration but act directly on the nervous system producing great relief. The disturbance of the Stomach may be an effect or a cause of irritation in the Eighth pair of nerves we should therefore maintain regular evacuations by aloetic & Galbanum & assafoetida these will often keep off attacks. Whenever the face is livid, & there is a plethoric state of the parts about the head. the action of the Heart being strong with signs of pulmonary congestion we should always bleed but great care must be used in the repetition of this as long repeated evacuations prolong & confirm these diseases - Bleeding should never be practised during the paroxysm. It is only used to prevent any danger from Sanguineous Congestion. Blisters to the Chest are very serviceable if the paroxysm is severe. Pediluvia and Sinapisms to the feet.

Angina Pectoris is characterized by a constricted tight lancinating pain of the Chest extending along the neck to the shoulders and down the arm particularly down the left as far as the Elbow and temporarily suspending the whole muscular power connected with respiration speech & motion during the attack

the Patient keeps the body erect or bending a little forwards they support themselves by any props which they meet with & exhaust their strength by painful efforts to inhale air into the chest so that they die from Asphyxia depending on muscular in-ability. Besides these symptoms we have praecordial anxiety frequent eructations & an abundant flow of limpid urine Face pale or livid according to the cause. Respiration & circu-lation are not disturbed the Lungs & Heart acting naturally It is only the mechanical process of respiration which is disturbed. Percussion & auscultation only give signs of

From these remarks the disease appears referable to a morbid state of the nerves supplying the parietes of the Chest rather than to any diseased action in the viscera themselves - It is supposed to be necessarily dependent on diseased heart. It is a common disease often attacking only once. It is often connected with disease of the heart of different nature but Dr E. thinks by no means in-variably so. He states that diseased heart is not the essence of the disease but merely an exciting cause. It is however always serious & most of the patients die suddenly - Dr E considers it to be a spasmodic painful neuralgic state of the nerves as it leaves no organic altera-tion behind it. The diaphragm is sometimes affected with the disease, but the numerous distribution & anastomoses between the Par vagum & other nerves supplying the Chest will account for the It is sometimes produced by over-repletion.

__Causes.__ It occurs more frequently in men than women & is rarely observed before the age of 40 or 50 though sometimes occurring earlier. Some trace its origin to ~~an antecedent attack of~~ retrocedent Rheumatism or Gout - Diseased heart is a frequent exciting cause It is also often caused by colds - sudden variations of temperature, violent exercise especially in winter when the diaphoresis thus excited is suddenly checked & as it were driven inwards, strong mental affections & over-repletion of the Stomach.

__Prognosis.__ is always serious but not necessarily fatal - It depends chiefly on the complications of the disease thus if combined with disease of some vital organ our expecta-tions must be slight. The disease may prove fatal during the paroxysm without any organic alteration being discover-able after death - Dr Eccles think it often depends upon some affection of the nerves forming the Cervical plexus.

__Treatment.__ When the paroxysm is slight, by removing the cause we remove the disease also. Our treatment must embrace Emetics & Nauseants & if it continue Antispasmodics and Tonics - Bleeding may be necessary but is always injurious during the paroxysm, - Pediluvia containing Salt & Mus-tard - Mustard Cataplasm, & Blisters to the Chest.
To prevent return of the attack Antispasmodics &
Sulphas Cupri, Argenti Nitras, Carbonas Ferri is now very much used. Sulphate of Quinine. Extract Belladonna

__Hydrothorax.__ by which we understand not an effusion into the chest produced by Inflammation, or disease of the heart but an Idiopathic dropsy. This, to such an extent as to cause death is very rare not more than 1 in 1000. These effusions are generally consequent on diseased heart, the effusion from Pleuritis was formerly considered as Hydrothorax and

in very anasarca

Hydrothorax attacks weak & lax & & leucophlegmatic [illegible] debilitated by excessive discharges & is always preceded by Oedema of the legs that is followed by a sense of weight in the chest afterwards there is great uneasiness and the patient can scarcely lie down. the distance between the ribs is increased. the pulse is never affected & the patient can lie down with tolerable ease till the effusion is considerable. Should no Oedema precede the dyspnoea but follow & relieve it, it is obvious that the dyspnoea is owing to Hydrothorax

Symptomatic Hydrothorax. is very common in the course of several diseases & indicates the approach to a fatal termination often preceding death for a short time only. It presents the same symptoms as Idiopathic hydrothorax and sometimes there is much effusion into the pleura without dyspnoea. The serum in the primary form is colourless or lemon coloured & transparent. While that resulting from Pleuritis is sometimes red, white, or mixed with flakes of coagulable lymph

Treatment As it is generally connected with debility the must not be active, it should consist principally of diuretics as Calomel & Squill. Broom, Taraxacum &c. Blisters to the chest to promote absorption & nutritious diet.

Diagnosis between Hydrothorax & Diseased Heart.

Hydrothorax.	Diseased Heart.
1. Countenance pale thin & languid lips pale & bloodless	1. Face red swollen & Oedematous lips turgid purple or black.
2. The side on which effusion is present is rounded & the intercostal spaces are wider than on the other	2. Neither of these signs are seen in organic disease
3. In the latter periods of the disease the integuments of the chest are Oedematous, - pure Hydrothorax is always preceded by Oedema of the legs	3. In diseased heart - neither the chest nor the legs are affected with Oedema the general dropsy is observed
4. Percussion yields a defective sound on the affected side extensive or partial according to the quantity of fluid effused & varying with the position of the body according to the laws of gravitation	4. Percussion elicits a dull sound limited to the region of the heart not varying with the position of the patient & in some cases preternaturally increased.
5. Patient lies on the affected side & on a level surface	5. Patients with diseased heart lie best with the head & chest raised or when in the sitting posture & they rarely lie down on the affected side.
6. No palpitations Pulse soft and regular.	6. Palpitations & irregular action of the heart; Pulse hard & irregular
7. Breathing not difficult. cough slight & expectoration. Sleep undisturbed.	7. Breathing difficult especially when recumbent. Cough violent & the sleep much disturbed by startings & frightful dreams.
8. Urine in Hydrothorax pale and clear	8. Urine thick & turbid in affections of the heart
9th. In Hydrothorax the course of the complaint is gradual & constant passing from the first to the last stage.	9th. The disease is very variable always changing from extreme suffering to perfect ease. & the patient tho at the last in great anguish.

In simple hypertrophy there are no irregular strong palpitations; while in Aneurism with hypertrophy we have tumultuous palpitations with a sense of suffocation. In Aneurism with hypertrophy the pulse is strong. In aneurism without hypertrophy the pulse is weak. In Hypertrophy the face is flushed, when there is no hypertrophy we observe no injection of the eyes or flushing of the face. In Hypertrophy the heart pulsates strongly there is [illegible] with aneurism frequent stupor, vertigo & heaviness, while in Passive Aneurism we have none of these symptoms.

Partial or complete Aneurism may take place either in the auricle or ventricle a circumscribed cavity is observed filled with dense strata of fibrin. Sometimes the lining membrane of the heart is prolonged into the cavity forming its inner coat. In most cases this does not happen, the inner coat being ruptured by ulceration. There are no symptoms by which the partial can be distinguished from general dilatation.

Causes of Hypertrophy & Active Aneurism — are causes which operate powerfully on the nervous system — strong moral affections great muscular exertions, the excessive use of stimulants, certain morbid specific principles as Rheumatism Gout & Syphilis.

Causes of aneurism are all obstacles to the circulation of the blood whether in the heart, lungs, liver or any other part of the system the most common are in the Heart & lungs & especially malformation of the heart, a very frequent cause is obstruction in the valves from induration, ossification &c. adhesions of the surfaces of the pericardium from pericarditis lead to aneurism of the cavities aneurism may take place independently of any obstruction from mere increase of the nutritive process.

Causes of passive aneurism are all of a debilitating nature weak constitution — long continuance of [illegible] , poor diet and all depressing passions sorrow grief &c

Treatment. The indications of treatment in Hypertrophy and Aneurism are the same, I To diminish the quantity of circulating fluid so as to allow the heart to collapse II To diminish the frequency & force of the heart's action. Bleeding not only removes the quantity of blood in the system but also diminishes its qualities & stimulating action hence we should starve the patient We must bleed every week or ten days. — allowing just enough food to be consistent with life & to enable the patient to bear the necessary treatment Leeches may be applied to the region of the heart. Seton & Issues should be inserted in the neighbourhood. Sedatives as the Nitrate of Potash. Acetate of Lead is also sedative but its use cannot be continued. Digitalis — Tartar Emetic and colchicum, Saline refrigerants are sedative and vegetable acids the diet must be vegetable & farinaceous. Where there is frequent sense of suffocation with florid face or livid state of the lips the [illegible] indicated this however must be limited & accordingly must be discontinued when any symptoms of dropsical effusion manifest themselves — this is always a precursor of death & in this stage it is that we find Stimulants & Antispasmodics relieve the dyspnoea & sense of suffocation.

Induration of the Valves The mitral & sigmoid valves are subject to become the seat of cartilaginous induration or ossification which alters their form, impedes their movements & prevents their action. This alteration rarely occurs in the valves on the right side of the heart & when the right valves have been found ossified a preternatural communication has been seen to exist through the foramen ovale between the two sides. and in this case it is probable that the

ossification depended on the presence of arterial blood
Induration & Ossification of the valves by contracting their
orifices obstruct the flow of blood. On applying the hand to the
præcordia a sense of jarring is felt the pulsation of the heart
is strong & forcible singularly contrasted with the small weak
pulse. A peculiar jarring is often felt in the pulse the sensation
is more observed when the Aorta or Mitral valves are affected. When
the disease is on the right side the hand applied over the præcordia
will detect it - but the pulse will not be affected remaining regular.
The Ear or Stethoscope applied over the left ventricle detects a sound
called the bruit de soufflet, bellows sound - or the bruit de raspe, file sound
When the left mitral valves are affected the sound succeeds to the
contraction of the auricle. When on the Aortic valves it follows the
contraction of the ventricle, these sounds are never to be considered
as diagnostic but must be considered in combination with other
symptoms - they must be heard regularly, if occurring only now
and then they do not necessarily indicate diseased heart ~~as they~~
~~do not necessarily indicate diseased heart~~ may occur in the
palpitation of hysteria. There has been some dispute regarding
the production of these sounds. Whether the bruit de soufflet depends
on a forcible contraction of the heart to overcome some obstacle to the
circulation - or whether it is owing to regurgitation since the valves
when opposed do not close the opening completely - & in hysterical pal-
-pitations this depends on a want of power in the valves to prevent re-
-gurgitation. The bruit de raspe is produced by the sound of the blood
passing over a rough surface. Induration & its general symptoms
may be observed for years before the sounds be perceived. There are
long intervals of ease but there are many exacerbations accompanied
by difficulty of breathing, orthopnœa &c. Dr. ... mentions a patient
who had symptoms of disease of the heart for 50 years & died at
the age of 80 years

Treatment. They are said to arise from inflammation of a Rheumatic
Gouty or Arthritic nature and under such circumstances we should pur-
-sue Antiphlogistic measures. but we rarely perceive the first approaches
of the disease as slight organic affections do not produce much dis-
-turbance. When the symptoms are decidedly marked our treatment
is altogether palliative and we may remove the most symptoms by
practising occasional Venesections, Aperients & Sedatives, as digitalis
colchicum Superacetate of Lead - afterwards when serous effusion takes
place relief is obtained by Diuretics as Squill, digitalis, Supertartrate of potash
Spare diet - repose both mental & bodily must be impressed on the patient
as absolutely necessary - & Issues & Setons may be inserted in the neighbourhood

Diseases of the Aorta.

Aortitis acuttus. presents a difficult diagnosis. Its symptoms are great in-
-crease of force in the pulsations of the Aorta - heat & pain in the region of the
artery, & when occurring in the thoracic aorta there is great anxiety & tendency
to Syncope like that which occurs in diseased heart. - Aortitis chronicus
presents no positive symptoms while mere inflammation is present
being rarely discovered till Ulceration has taken place in the coats
of the artery leading to the formation of Aneurism and when in con-
-sequence of this the circulation becomes impeded we have dyspnœa
on the slightest exertion, nutrition is impaired the countenance becomes
pale blood accumulates in the heart from obstruction to its transit
through the Aorta producing dilatation of the heart, palpitation &c.
When these symptoms are found without disease of the Heart
or its valves, we may safely predict disease of the Aorta.

Anatomical Characters. The principal characters are a redness
more or less Scarlet said to be sometimes violet or black confined to the
internal membrane like a simple discoloration of the coats from
the blood. It was formerly stated that there was but little difference
between the redness produced by Aortitis & that from asphyxia or
in persons who have been examined some time after death
Lately a distinction has been drawn between these two appearances

The redness from inflammation consists in a crimson redness more or less opaque differing materially from the violet redness from mere imbibition of blood. In the latter case too the texture of the vessel is natural while in inflammation the inner coat loses its natural polished appearance becoming opaque, often softened & easily detached. The vasa vasorum are injected when the redness is uniform it presents boundaries which are arborescent from the injection of these minute vessels. In the redness from imbibition there is no injection of the vasa vasorum. The tint of redness from inflammation differs in the three coats being most intense in the internal while in imbibition the redness is uniform. This redness is observed in all cases of death from great difficulty of breathing producing suffocation & asphyxia.

__Causes__. are the same as those of Carditis & Pericarditis, external injuries as blows, contusions, violent continued exercise, the use of stimulating food & drink, extension of inflammation from neighbouring parts — __Prognosis__ there are not sufficient number of cases of acute aortitis on record to found any prognosis the Chronic form gives rise to Ulceration & Aneurism which is one of the most serious diseases of the Chest.

__Treatment__ of acute Aortitis must be highly antiphlogistic venesection, topical bleeding, Refrigerants, Purgatives, low spare diet, Local bleeding with Cupping glasses or leeches will be found very useful — Sedatives such as the Nitrate of Potash Digitalis &c with perfect repose of body & mind

__Aneurism of Aorta__. Symptoms. The sound is more clear and sonorous the shock more violent lifting the head from the chest the sound is also circumscribed but is heard over a larger space than natural. The bruit de soufflet or whistle sound, is heard, the pulsation of the heart natural — the pulses of the two wrists

are unequal — there is a wheezing when the patient coughs or breathes. Percussion over the sonorous part is dull with no symptoms of reaction. When the Aneurism compresses the air tubes we have wheezing & dyspnoea. Oppression of breathing sense of suffocation pain in the head &c. When it presses on the Oesophagus it produces dysphagia & we have hemorrhage from various parts if rupture of the Artery takes place.

~~True~~ aneurism have been divided into true & false — but the states which give rise to this division have been differently described by different authors thus in __France__. __True Aneurism__ is that which is formed by the dilatation of the coats of an artery — __False__ aneurism that which is formed by rupture of the inner & middle tunics & dilatation of the cellular coat only — in England the converse obtains —. Dilatation generally takes place from alteration of texture in the Aorta. Partial dilatation may occur without alteration of structure but generally the two inner coats are diseased & if the layers of fibrin which we find deposited to fill up the cavity nearly closing the calibre of the vessel we shall find the external much the hardest while the inner layers are soft & reddish like recent coagulum. Dilatation & Rupture may be met with simultaneously. the Inner coat may be sound but may be protruded through the rupture of the middle coat like a Hernia. The middle coat is most generally ruptured. The bones in contact with the Aneurismal sac are destroyed either by attrition or absorption aneurism of the Pulmonary artery always inclines to the right side pulsating behind the root of the right lung. Aneurism from dilatation is most frequent in the Ascending Aorta whilst aneurism from laceration & erosion is generally met with in the descending Aorta The arterial coats may be thinned & extended or thickened & denser than natural. In active aneurism we

first dilatation & thickening. In passive aneurism, dilatation & attenuation. Cartilaginous & Calcareous incrustations are generally found in the dilated part. When situated in the thoracic Aorta the symptoms are observed under the sternum & Costal Cartilages on the right side & the size of the tumor is indicated by the extent of sound. The descending Aorta when affected with aneurism ~~[illegible]~~ is discovered by pulsations heard at the spine striking the ear with great violence.

Causes Predisposing are loss of resistance in the coats of the vessel from alterations produced by Chronic inflammation the Exciting cause must be the natural impulse of the blood, from which it follows that Hypertrophy of the ventricle causes dilatation of the Aorta, hence also violent exertions and anything which excites violent action of the heart causes aneurism of the Aorta.

Treatment the same as that for aneurism of the heart. We have to diminish the stream of blood, to diminish the heart's action by sedatives, spare vegetable diet. Leeches &c. Sometimes these remedies produce a cure & this occurs most frequently in Aneurism from dilatation. Sometimes however they succeed in aneurism from erosion of the coats. The partial dilatation has become obliterated & a tumor has been formed instead produced by thickening of the coats of the artery. In some cases the vessel has become obliterated & the circulation has become carried on by enlargement of the collateral branches. Sir A Cooper applied a ligature to the abdominal Aorta & the patient lived for four days after.

Gastritis acutus. Sometimes it affects the lining membrane only, sometimes it affects the mucous & muscular coat also. The first symptom is a fixed acute burning pain in the Epigastrium extending to the Hypochondria & Spine, increased by all ingesta even of the mildest nature, increased also by inspiration, by pressure & by the slightest motion. This is only to be confounded with Cardialgia which differs from it in not being increased by pressure or motion. In acute Gastritis there is always distension while in Cardialgia there is contraction. 2nd Symptom is great anxiety with tension & swelling of the Epigastrium 3rd a painful vomiting increased by all nourishment taken into the stomach — febrile symptoms, shiverings followed by heat thirst headach loathing of food — the thirst is insatiable there is constant hiccup, fainting, sometimes convulsions, delirium sinking & collapse of the features. Pulse small contracted and intermittent, rarely full & hard, cold extremities, difficult deglutition — a fear of fluids amounting almost to hydrophobia although the thirst is insatiable, rarely accompanied by inflammatory fever the attendant fever being usually typhoid & accompanied with great debility. It is rare as an idiopathic disease, but is occasionally produced by poisoning.

Causes acrid poisons taken into the stomach, metastases of Gout and Rheumatism, violent blows & falls upon the stomach, strangulated hernia, violent mental passions, excessive use of Spirits, Copious secretion of bile, swallowing cold liquids when the body is hot, disturbed state of the digestive function particularly that producing great acidity of stomach.

Terminations It terminates by resolution indicated by copious perspiration

a copious discharge of limpid urine, liquid evacuations &c.
2. Ulceration which is very frequent & in which the mucous coat presents numerous small ulcers penetrating through it. 3. Scirrhus pylori this occurs in Scrofulous subjects. It is observed to terminate in Gangrene when accompanied with fever having a typhoid character with cold extremities extreme anxiety great prostration of strength, low delirium and convulsions, it rarely terminates in abscess.

Anatomical characters. a highly injected state of the mucous membrane varying from vivid red to a dark brown with swelling & softening patches of deeper red like ecchymoses. it is also covered by numerous red streaks or arborescent vessels. When the muscular coat is also affected the parietes are much thickened and of a deep red colour from infiltration of blood or the stomach may be much contracted but rounded & not collapsed.

Prognosis. is unfavourable especially if the inflammation is produced by poisons. It is said that acute Gastritis rarely terminates in abscess but Dr Eccles has seen many cases in which the termination has been indicated by suppuration.

Treatment. This will vary with the nature of the cause some requiring instant evacuation of the stomach by Emetics or the stomach pump and the use of antidotes oleaginous & albuminous. When severe inflammation has set in copious & prompt bleeding is required & this is not contra-indicated even when the pulse is small & the extremities cold. the V.S. must be repeated according to the violence & obstinacy of the inflammation. Emollients must be supplied to the Stomach. Warm baths, repeated blisters and Leeches to the Epigastrium. When the active symptoms have

in a great measure subsided a large blister to the Epigastrium &c. Emollient & purgative Enemata are almost the only internal remedies we can use in consequence of the constant sickness which is present. We may give mild mucilaginous demulcents, as the Mucilago acaciae Infusum Lini &c When the symptoms are relieved small quantities of opium & other sedatives. Perhaps the opium may be injected per rectum. Every thing should be administered warm to the patient. We should never administer saline medicines as they will by their action irritate the stomach and increase the inflammation.

Gastritis chronicus. The chronic inflammation of the mucous membrane of the stomach is a very common disease. Its symptoms are those of common dyspepsia, acidity of stomach, frequent eructation flatulence. Pain slight (often none at all) occurring after each meal and continuing during the process of digestion. As the disease advances vomiting occurs, the uneasiness+ becomes constant and permanent, and the patient sinks under the attack. Sometimes vomiting of a glairy fluid like white of egg streaked with a blackish matter like coffee grounds supervenes, without vomiting of food. The inflammation often commences in a small portion of the organ & progresses very slowly till its parietes become thickened adhesions are contracted to the neighbouring organs, & ulceration takes place. The ulcers vary in form are sometimes small with raised edges, at other times the ulcers are larger & superficial and we sometimes have extensive ulceration with thickening and induration, these ulcerations are fatal by a gradual exhaustion. The

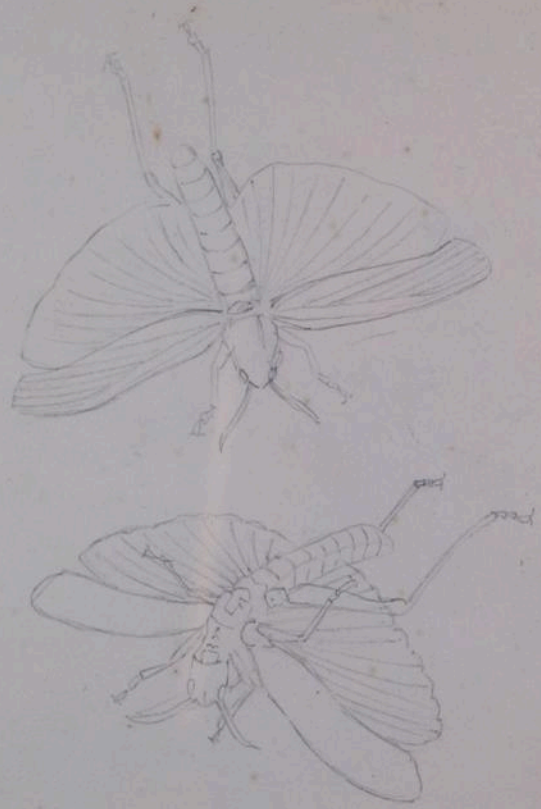
+ The uneasiness is increased by exercise

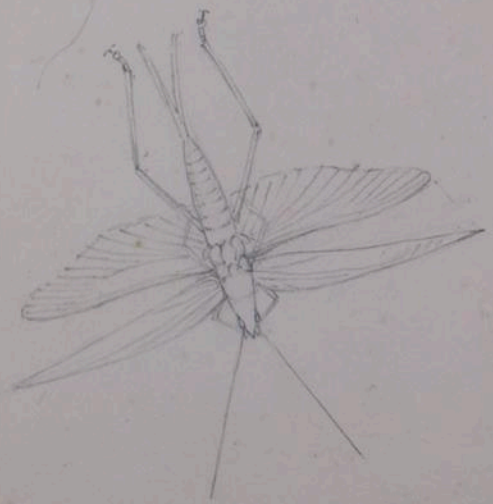
Dyspepsia consists in disturbance of the natural process of digestion. It may be Idiopathic arising 1st from weakness of the muscular coat 2dly from morbid sensibility of the nerves supplying the organ and 3dly from a morbid state of the Secretions. Uneasiness & pain is felt in the Stomach called Gastrodynia, sense of weight and distension after taking food, vomiting, Pyrosis, eructation of a glairy fluid irregularity of hunger & thirst.

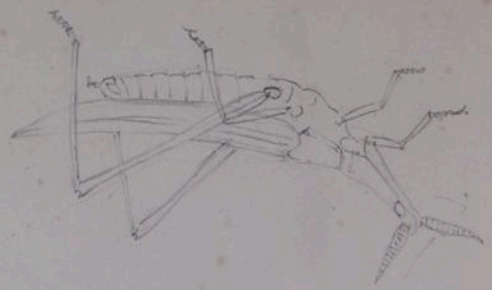
1st Dyspepsia from weakness. Symptoms absence of thirst, great paleness of the tongue, sense of weight & distension after meals. Pulse and more frequent than natural & there is general debility. The remedies adapted for these cases are Tonics in infusion or substance the preparations of Bismuth & Iron combined with a sufficient quantity of Rheum or aloes to keep up the action of the bowels

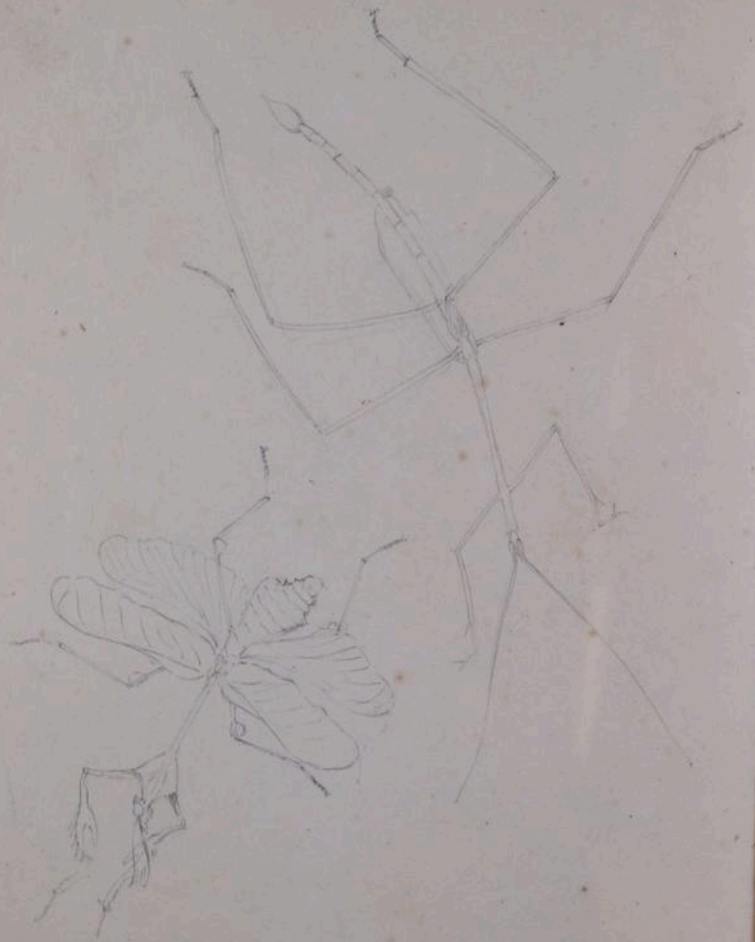
2 Dyspepsia from morbid sensibility of the Nerves. In this form every thing which is swallowed is rejected or if retained causes a sense of heaviness. The Stomach in this case will not bear Tonics or we use stimulants the best tonic is dilute sulphuric acid with syrup of poppies – ? Lytta are often advantageous, with light diet

Dyspepsia from deranged secretion. We have vomiting of a thin acid saline fluid sweetish or often saltish – there are copious glairy fluid with violent spasms & contraction of the stomach. Sense of pain and uneasiness is felt when the stomach is empty which is relieved by alkalies chalk &c This will often continue obstinate under the alkaline treatment & subside under the use of acids it is also cut off by the administration of Opium with astringents such as Kino alum &c Bismuth is often efficacious in this form of dyspepsia. ——









COLEOPTERA.

1 Scarabaeus Molossus. 2 Scarabaeus Seniculus.

3 Scarabaeus Bucephalus.

COLEOPTERA.

1 Scarabeus Midas.

2 Scarabeus nasicornis.

3 ——— cinctus.

4 ——— sacer.

5 ——— Leei.