run its course of inflammation and gangrene, and kill in the course of twelve hours; and the patients who have once escaped from it, are liable to attacks of it from very slight causes; if costivness exists, it is sure to exasperate the symptoms and to encrease the danger. When gangrene sets in there is a mitigation of the pain; but with coldness, loss of strength, and a sinking of the pulse, which sufficiently point out the approaching event. Acrid food and hard of digestion, as smoked meat, may cause gastritis, in persons subject to it; too great or too frequently repeated doses of emetics, especially antimonials, and acrid purgatives in large doses, or in doses badly or injudiciously prepared, may also cause it. Erysipelas repelled or spreading from the surface to the stomach, may induce dangerous gastritis.

#### CHRE.

The prospect of saving the patient depends almost entirely upon blood-letting, from which we must not be deterred by the state of the pulse; and it will be necessary to repeat it from time to time, until the danger be subdued. It is obvious that medicines taken by the mouth must rather exasperate than mitigate the symptoms, whilst the stomach is so extremely irritable, that it instantly throws off by vomiting every thing swallowed; even opiates are hurtful in the beginning until this irritability is allayed, but as it is of material

material advantage that the bowels should be opened and preserved in a regular state, purgative glysters in small bulk, as in No. 95, ought be administered, and repeated at short intervals until the bowels are relieved. The feet ought to be bathed frequently, and a large sharp blister laid over the pit of the stomach. If it be produced by poisons; along with the blood-letting, and the evacuations by stool already mentioned, correctors should be employed if possible, adapted to the qualities of the acrid or poisonous cause; but when inflammation of the stomach is the effect of poisons, it is but candid to observe that the case is commonly hopeless.

After the inflammation has subsided, and the acrimony of the primæ viæ has been removed by means of the glysters, opiates injected per anum, as in No. 41, will be useful to allay irritation.

The diet in gastritis, or more properly, after the vomiting and inflammation have stopped, must consist of liquid aliment, bland, and easy of digestion, such as light broths, gruel, panada, arrow root, and such like; the drink might be barley water, runnet whey, fresh buttermilk, &c. There must be particular attention to keep the patient warm and protected from every exciting cause. When the pain, inflammation, and vomiting have disappeared, a little castor oil might

might be taken occasionally to preserve a regularity of the bowels, and repeated as often as may be necessary, until the health is restored; afterwards the patient might resort to such other purgatives as the nature and urgency of the symptoms might require.

From the tendency of gastritis to return in persons in whom it has once occurred, the means recommended for the purpose of securing the patient against a relapse, must be persevered in for several weeks after convalescence has begun.

ENTERITIS, OR INFLAMMATION OF THE IN-TESTINES, COMMONLY CALLED INFLAM-MATION OF THE BOWELS.

This resembles the inflammation of the stomach in many respects, as in the low typhoid state of the pulse, in the agonizing severity of its pain, in its disposition to return, and in the rapidity of its progress often to a fatal termination.

Inflammation of the intestines is a more frequent disease than gastritis. As the pain and distress in gastritis are referred to the seat of the stomach; so in enteritis there is a violent twisting pain of the belly, most severely felt about the navel, accompanied by the following symptoms; tension and hardness of the belly, and frequently

an irregularity of its surface as if from a number of balls or lumps; flatulence; great anguish expressed by the countenance; thirst; difficulty of making water; bowels confined, and sometimes a seanty purging accompanied however with a retention of the solid excrements; a burning fever; vomiting, but not so violent and incessant as in inflammation of the stomach; the pulse is small, quick and wiry. When a fatal termination is approaching, the extremities become cold, the face and lips of a livid paleness; and a cold clammy sweat breaks out upon the face, head, and upper parts of the trunk of the body. When this complaint has once happened, it is very apt to return from slight causes. In those cases which terminate favourably, adhesions are generally formed in consequence of the preceding inflammation, between different parts of the intestines, and also between their enveloping membranes, which in a state of health are not attached to each other: hence there is a greater degree of soreness experienced where the inflammation existed, and a stronger predisposition to the renewal of the complaint.

When gangrene sets in, the pains entirely subside, and often leave hopes of a recovery; but the sinking of the pulse, the expression of the countenance, and the coldness and livor of the body, are always sufficient to correct this mistake.

Death supervenes sometimes very rapidly in enteritis, not unfrequently in twenty four hours. The symptoms of colic are very like to those of inflammation of the infestines, but in the latter the pains are more constant than in colic; should a mistake however arise concerning the nature of the disease, it cannot be productive of any material injury, because the same treatment is suited to them both. The pain in this disease is excessively severe, because the parts inflamed are naturally very tender, because it is exasperated by the incessant peristaltic motion, to which the intestines are subject, and because the food and excrements must pass constantly through, and therefore irritate them. The distension likewise of the intestines occasioned by the extricated air, and by the bulk of the alimentary mass, must greatly aggravate the suffering and encrease the pain.

#### CAUSES.

The causes are similar to those of gastritis, as poisons; acrid food; large doses of acrid medicine; long confinement of acrid excrements in the alimentary canal. Ruptures will also cause it; erysipelas translated from external parts is said sometimes to cause it; colic often ends in inflammation of the bowels: but the most common cause of all, is cold applied to the surface, particularly the feet, if the body is at the same time in a delicate

delicate or irritable state; excessive eating, intemperate habits, and drinking largely of spirituous liquors may likewise bring it on. Irregular gout is sometimes inclined to attack the intestines, and then it will occasion all the distressing symptoms of enteritis, with their melancholy consequences. Instances of enteritis are met with at all periods of life, but it is more frequently a complaint of advanced years than of youth or manhood, perhaps because the bowels are more slow in persons who have passed the meridian of life, than at earlier periods; it is probable too, that the proportion of the mucus, which protects the internal coat of the intestines, and which is very copious in infancy, becomes gradually diminished as we advance in life, and thus at length exposes the intestines to be more easily inflamed by those irritants which cause the complaint.

#### CURE.

In inflammation of the bowels the method of cure is very similar to that of inflammation of the stomach. Bleeding freely from the arm and repeating that bleeding at short intervals is our principal resource; the pulse which was small and wiry before, becomes full and soft after the bleeding; warm fomentations, particularly spirituous fomentations, should be applied to the belly, and frequently repeated after the symptoms are mitigated

gated by the bleeding, and continued for a long time, perhaps for an hour or two: these fomentations have a powerful effect in relieving the inflammation and spasm of internal parts, but if applied before the internal inflammation be already mitigated by blood-letting, they only encrease the feverish heat, without reducing the severity of the pains. The effect of warm fomentations might also be produced internally, by means of enemata or glysters, composed of linseed decorrion, with the addition of some sweet oil; these enemata might be frequently repeated.

There are but few hours in which we can have any chance to save the life of our patient; therefore our practice should be vigorous and decisive. After bleeding to the extent which appears necessary, in cases of alarming danger, instead of the spirituous fomentations just recommended, a large and sharp blister ought be laid over the whole belly as far as the pain extends: this is an excellent auxiliary to bleeding, and frequently subdues the remains of the pains and irritation. After the severity of the disease has been greatly mitigated by those means, mild laxative glysters might be used, and repeated at the interval of six or seven hours until a stool is procured. Decoction of senna, with manna dissolved in it, will commonly answer this purpose; afterwards mild purgatives taken by the mouth, such as phosphorated

rated soda dissolved in broth, and given in small repeated doses, will be very useful. After the regularity of the intestines is pretty well established, two or three grains of calomel given without any addition, and soon followed up by a moderate dose of castor oil, is an excellent laxative, and leaves the alimentary tract more free from acrimony than any other aperient in common use: afterwards rochelle or epsom salt in small doses, and dissolved in any agreeable water, will help to preserve a regular habit of bowels, and to secure from a return of the complaint. Warm clothing, light food in a liquid form, and taken in moderate quantity, ought be used as in gastritis; and all the exciting causes carefully avoided. The bowels are to be preserved in a state of uniform regularity; and whenever any tendency to bilious acrimony is manifested by the state of the tongue and proccordia, a small portion of a mercurial purgative should form a part of the medicine recommended for the relief of the bowels.

After the immediate danger is subdued, we must for a long time persevere in the precautionary plan of guarding the patient from a relapse; because this is a disease which is known most commonly and severely to make its appearance again from the slightest causes.

MEASLES

## MEASLES.

Measles, according to Sydenham, commonly begin in December or January, continue to spread and encrease until the vernal equinox, and though they still continue in many instances, yet from that period their severity gradually abates, and the numbers attacked by them become less until the month of July, when they for the most part disappear: sometimes however a few scattered cases of them are found at all seasons of the year; but this account of their occurrence and frequency is not always exact.

Measles, like all diseases which seldom occur but once through life, chiefly attack children; but all those who have not had the disease before, are liable to be attacked by them at any period of life: though they very seldom visit the same person twice, yet there are undoubted instances of their having occurred a second time.

Measles

\* I attended a gentleman about twenty three years of age, in this complaint, who from a firm conviction of his having had measles when a boy, could not be persuaded that the complaint he then had was measles; he admitted that he had been for several days before visiting a friend in measles, that the appearance of the symptoms in him and in his friend was the same, and in all respects, as well as he could remember, similar to the symptoms of the measles which he had when a

Measles set in with a chilliness, shivering, and sense of encreased heat and cold, which alternately succeed each other; these are the symptoms of the first day: on the second the fever becomes more completely formed; vehement sickness, thirst, and loss of appetite come on; the tongue is loaded, white and moist, but often foul and bilious; this is the state of the tongue at the commencement of most febrile diseases; there is a dry and husky cough, hoarseness, sore throat, heaviness of the head and eyes, drowsiness, particularly in children, sneezing as if from having caught cold, a running from the nose and eyes, and an intolerance of light; these symptoms encrease in vehemence until towards the fourth day, when the eye-lids swell a little, and sometimes a vomiting comes on; in children there is also frequently a purging, and that more certainly during the period of dentition; then too the stools are green, and the little patients very fretful. About the fourth day, when the symptoms have all arrived at their greatest severity, little red spots like flea-bites begin to appear on the forehead and other parts of the face, which, encreasing in number, run to-

boy, and yet from a rooted conviction that measles never visited a second time, he could not be brought to acknowledge that his complaint then was measles. I could not ascertain whether the former complaint had been the mild measles with little fever or catarrh, but the complaint which I saw was inflammatory, with a sharp fever and severe catarrhal affections.

gether in clustres, forming spots of different size and shape over the face; they also appear on the palate, velum, tonsils, and internal fauces, in deepcoloured irregular streaks, and encrease the soreness of the throat, the hoarseness of the voice. and the huskiness of the cough; the eruption sometimes begins on the third, and sometimes not until the fifth day, but most commonly on the fourth; these spots or blotches often cover almost the whole of the face, and are composed of small red pimples seated close to one another, and rising a little above the surface of the skin, so that they may be felt with the finger in cases where their elevation cannot be perceived by the eye. Those spots spread from the face, where they first begin, over the breast, trunk, arms, legs and thighs; but on the trunk and extremities they are merely red spots in general, without being perceived even by the touch elevated above the skin; there are some cases however of high fever and vivid eruption, in which the elevation of the clustered papulæ can be perceived also on the breast and trunk by the finger: sometimes, though seldom, the eruption appears first on the breast and upper part of the trunk, and not on the face. The fever and eruption in some instances begin together: there is often a considerable stupor from the beginning of this complaint, which produces retention of urine, and sometimes ends in a spasm of the sphincter of the bladder,

causing

causing strangury; and in some instances the stupor rises to apoplexy.

The pulse is generally full and quick, but during the torpor it is often uncommonly slow.

In the beginning of measles, there is often an epistaxis or bleeding from the nose, and sometimes a spitting of blood.

The eruption is often delayed for some days by accidental causes. Cold applied to the surface, severe diarrhæa or purging occurring in the beginning of the eruption, and a copious homorrhage, such as a large bleeding from the nose, will retard the eruption; and in those cases the eruption is paler than when such causes do not occur to delay it;\* the breathing is somewhat laborious, and there is often a pain the chest.

In three, four, or five days after the eruption has begun, the skin becomes paler and is covered with small branny scales, but these scales are not so constant nor so copious in this as in scarlatina.

In most

<sup>•</sup> Instances have been known where the patients having been exposed to the contagion of small-pox, after being attacked by measles, first went through the regular progress of the small pox, and then had the measles.

In most cases measles are a very trifling disease; the symptoms then are those of slight ophthalmia and of catarrh united, the most prominent of which are soreness of the eyes, sneezing, hearseness, and cough; and upon the eruption appearing all the symptoms are considerably mitigated, so that the patient feels little uneasiness, except perhaps a slight soreness of the eyes, and some remains of cough. There are however some alarming instances in which the eruption proves slightly critical, and even in which the symptoms are worse after the eruption; in those cases the cough becomes more distressing and more frequent, the oppression of the chest encreases, the breathing is more laborious, and all the other symptoms of inflammation of the lungs come on.

In the milder measles, the cruption is always critical more or less; and soon after its fading, the disease is entirely carried off by a slight diarrhæa, or purging, which is the natural solution of the complaint.

Children are more subject to this disease than grown persons, but it spares neither age nor sex in persons who have not had it already. The danger of it is greatest in scrophulous constitutions. As it affects the mucous membrane of the throat and lungs, throughout its elongations, with an inflammation of a peculiar kind, it has a strong resemblance

resemblance to catarrh; like that complaint too, it will sometimes pass from the mucous membrane into the substance of lungs, and cause pneumonia in some, and tubercular inflammation ending in phthisis, in others. These are its fatal terminations.

## DIAGNOSIS.

The eruption is sometimes so slight and pale, and disappears so soon, that it is altogether over-looked, and the complaint passes for catarrh; but from this mistake little injury can arise, as mild measles and slight catarrh require pretty nearly the same treatment; and as the pectoral symptoms in measles are those for which it becomes most necessary to provide remedies: but even before the eruption, a distinction can be marked between measles and pectoral or pulmonary complaints properly so called, by the sneezing; running from the eyes; and husky cough, which belong to measles: the great drowsiness which commonly belongs to this and to most other eruptive disorders, does not occur in catarrh.

From scarlet fever measles may in general be distinguished by the following characters. In scarlet fever, the eruption is more uniformly spread over the surface than in measles, in which the eruption is in irregular blotches or clusters, leaving interstices of the skin of a natural colour; but the scarlet eruption either forms an universal redness of the whole skin. or it is in wider and more equal patches, without such pale interstices. In scarlatina, the eruption is commonly complete on the second day of the fever; in measles it seldom begins before the fourth. The pectoral and catarrhal symptoms of husky cough, sneezing, running from the nose, and eyes, are more peculiar to measles; the intolerance of light is not so severe in scarlatina as in measles: the colour of the skin is a deeper crimson in measles than in scarlatina: the soreness of the throat is more superficial and slight in measles, without the enlargement of the tonsils, and maxillary glands, and the ptyalism and difficult deglutition which are often met with in scarlatina.

## THE CLE OF DOTON PROGNOSIS, MINE TO STUD OF

A slight fever, which goes off when the eruption appears, is favourable: a florid eruption on the face elevated above the skin; the skin becoming tense and somewhat inflamed; upon the fading of the cruption, the skin becoming soft with a gentle diffused sweat breaking out upon it; the drowsiness and pectoral symptoms of cough and quick respiration being mitigated by the appearance of the cruption; and a gentle purging coming on, when the cuticle begins to scale off; all these are favourable symptoms.

An enumeration of the symptoms which mark a mild disease, clearly points out those of the opposite kind, which are dangerous: such are a violent fever, attended with stupor and oppression about the chest; the eruption not coming forward vigorously, when the pectoral symptoms are severe; where the febrile symptoms are not mitigated by the appearance of the efflorescence; and when the pectoral distress encreases after the eruption fades; it is also a bad sign when the eruption does not advance, or is checked, or repelled in consequence of imprudent exposure to cold, or of a severe discharge of blood, or of a violent purging caused by accident or design.

#### CURE.

The cure of measles is conducted on very simple principles. For the purpose of guarding against the danger of catching cold, the patients should be confined to their apartment, the air of which ought to be kept pure, dry, and rather warm; by these means too the skin is kept soft, and the progress of the eruption is encouraged. Light and noise, and particularly conversation with the patient must be avoided in all febrile diseases, but especially in measles, where the

chest is so much affected, and consequently where an exertion of the lungs must be hurtful.

In mild measles, the principal remedies to be employed are from the class called demulcents and expectorants. In consequence of the torpor peculiar to this complaint, emetics which have a tendency to determine to the brain, are to be cautiously employed where this symptom exists; but where it does not, a gentle emetic is a safe remedy, and may assist in promoting the eruption: with the same view the lower extremities might be bathed in warm water at bed time every night until the cruption begins to fade. Expectorating emulsions are useful to soften the cough and allay its irritation, such as spermaceti beat up with yolk of eggs, and given with some agreeable water; oil of almonds and gums properly prepared have the same effect, as in No. 79, 80, these formulæ are fit for children: a small quantity of ipecacuan or antimonial wine, may be added, where it is an object to determine to the skin: but the antimonial wine must be sparingly used for children.

Measles, however mild, should never be neglected, as the mildest case of it might end in phthisis. Gargles in adults will be useful to keep the mouth and fauces clean, and to improve deglutition glutition: they might be made with a decoction of figs or raisins, or with mucilage, a small quantity of acid, some pleasant water, and honey; the vapour of warm water, or of any mild warm liquor, is also useful in relaxing inflammation: where the bowels have a tendency to be confined, they must from time to time be kept open with mild laxatives, such as manna, castor-oil, tamarinds, cream of tartar, or small doses of salpolychrest and rheubarb, or some agreeable neutral salt, as rochelle salt, or phosphat of soda, &c. but where the tongue is loaded and bilious, the purgatives, No. 1, 2, or 3, are best for adults; and for children, the powders, No. 12, 73, or 76. These will remove the sordes most effectually, and thereby mitigate the inflammatory and pectoral symptoms also, as I have often observed: if these medicines do not open the bowels in five or six hours, castor-oil given in doses proportioned to the age of the patient, will quicken their operation; for adults the purgative mixture, No. 4, may be employed, in place of the castor oil. When the powers of the system appear languid or exhausted, which can be ascertained by the cold skin, pale eruption, great dejection, and quick breathing; as this sort rapidly sinks the patient, stimuli and cordials must be allowed, and of all cordials, wine is perhaps, the best; it may be conveniently given in the whey or drink of the patient: fomentations in these cases are also useful by helping to encourage encourage a more vivid eruption, and to relieve the head and lungs: blisters then are indicated likewise for the double purpose of stimulating, and relieving the lungs; they should therefore be applied to some part of the chest, and in cases of torpor, to the head also. Where a sudden effect is desired, sinapisms may be used, as they are quicker in their operation. A purging sometimes occurs, which should not be hastily checked, as it is the most critical termination in this complaint.

Where the pulmonary symptoms of cough, pain of breast, dyspaca, and oppression are alarming, we must bleed very freely, and even more than once, if necessary: children themselves, who in general cannot bear bleeding well, must be bled under these circumstances; there is no other remedy to be relied on: even bleeding with leeches is too inert practice: blood must be taken from the arm, and from a large orifice; and when relief is thus procured, a blister will help to maintain the advantage gained by the bleeding.

If severe pulmonic symptoms set in after the eruption fades, the case is still more alarming, and requires blood-letting more decisively, and is to be treated in all respects like an inflammation of the lungs.

The torpor is sometimes so great as to make the patients insensible to the natural stimuli; it will then be necessary to call their attention from time to time to the state of the excretions, to urge them to make water, and to remind them of taking their drink, and whatever light food be allowed. In case of urinary retention, warm fomentations to the bottom of the belly will relieve, and if these fail, turpentine glysters will generally succeed.

In measles there is always danger, as long as any cough continues, therefore the physician's attention to the patient must be continued until the cough is entirely removed.

In those who are disposed to phthisis, and in scrophulous habits, all danger is not over, even when the cough disappears; to persons in whom this delicacy of constitution decidedly appears, it will be proper to recommend pure country air, milk diet, and exercise on horseback, or in an open carriage where there is not strength enough to ride; but when strength enough is gained to remain on horseback, that is decidedly the most valuable kind of exercise.

The food must be light, &c. as in inflammation of the lungs. Vide Pneumonia.

SCARLATINA

## SCARLATINA, OR SCARLET FEVER.

Scarlet fever has appeared frequently in Dublin during those twelve years past, and with considerable variety in its symptoms, at different times. In some instances, the mildness of the disease is such as to require very little medical assistance; in others its malignity is so great as to baffle all medical aid. It is observed too, that the mildest attack of it is in a few instances followed by consequences the most insidious and fatal; and that those who recover from the most alarming form of it, sometimes escape the danger of its sequelæ. It commonly happens in scarlatina, as in other epidemics, that its severity is greatest in those whom it attacks at its commencement; and that its virulence abates considerably when it has continued for some time: at all periods however during its continuance, some instances are observed, in which its severity is attended with alarming danger.

There were three varieties observed in the epidemic, which at different times appeared in Dublin of late years. The angina maligna, or scarlatina with aphthous and gangrenous sore throat; the mild scarlatina, in which the florid efflores cence upon the skin formed the whole or the principal part of the complaint; and the inflammatory scarlatina, in which a deep efflorescence,

an inflammatory sore throat, commonly with purulent ulcers on the tonsils, and a high fever, were the characteristic symptoms.

The season of the year in which scarlatina most commonly begins to spread is the month of August and September, but it is found to exist at all seasons. It sets in with the ordinary symptoms of fever, such as lassitude, languor, head-ache, pain of back, a sense of coldness or shivering, succeeded by encreased heat, anxiety, pain and oppression about the pit of the stomach, and sometimes nausea and vomiting: instead of head-ache, there is in some instances vertigo, in some delirium, and not unfrequenty fainting has been observed. The neck soon becomes swelled and stiff, and accompanied by a soreness of the throat, which is most distressing towards evening; and in scarlatina, it is remarkable that there is a considerable exacerbation towards evening, throughout the whole progress of the complaint; and the remissions of the morning are more considerable than in most other fevers, except the hectic of pulmonary consumption, and fevers of an aguish character.

The fauces and velum pendulum appear inflamed, but the inflammation is different in different persons; sometimes the inflammation is slight and surrounded by a paleness of the neighbouring parts, and as the complaint advances, light coloured spots form

form on the inflamed surface, which conceal ulcers of a livid colour that discharge a corroding ichor; this fluid excoriates the lips over which it runs from the nose; and where it is swallowed it causes a fætid watery purging by its irritation in passing through the alimentary canal; in many instances however of the worst appearances of this complaint, the bowels are slow and sometimes obstinately costive; the patient commonly breathes through the nose with a disagreeable snuffling noise, and the smell of the breath is extremely offensive; the maxillary and parotid glands become enlarged, whence arises pressure on the trachea and fauces or throat causing difficult respiration, and making it extremely painful to swallow. The tongue is covered with a white viscid mucus, which soon becomes of a dirty yellow, and then of a dark brown colour, particularly towards the root; the pulse is quick and feeble. The febrile symptoms in short, are very like those of bad typhus or nervous fever. The affections of the throat are the most alarming part of the complaint and often run into gangrene. It sometimes happens, especially in this modification of the complaint, that the eruption is not a spreading florid efflorescence, but consists rather of a number of red points scarcely visible, and sometimes not to be distinguished but by an accurate examination of the skin; they are most obvious on the upper part of the chest, on the neck

neck and on the shoulders. In such cases, which are commonly the most alarming, the skin is paler than in the others.

Such are the ordinary symptoms of scarlatina with putrid sore throat.

More frequently however the symptoms of sore throat are different, and more like those of angina tonsillaris or inflammatory sore throat; the tonsils are then very much inflamed, attended by a troublesome salivation, and ulcerated on their tops so as greatly to resemble inflamed tonsils covered with venereal ulcers; these appearances are accompanied with head-ache; throbbing of the temples; often delirium, and sometimes stupor. The skin is hot and dry; the pulse quick, but not as feeble as in angina maligna; the tongue is veryfoul and loaded; the præcordia painful and often hard; the breathing quick and anxious; and the sleep interrupted. Commonly on the second, but sometimes not until the third day, the whole body becomes covered with a florid efflorescence, of a brighter colour generally in persons of fair skins, than in those of darker complexions: Huxham observes that it is not unlike the colour of the juice of raspberries rubbed to the skin; the skin appears slightly inflamed; the swallowing is very painful; the maxillary and parotid glands swell, and sometimes in delicate subjects, where due attention has not been

paid to the state of the fever and of the bowels, these glands are known to inflame and suppurate. In some cases the whole skin swells and inflames with a considerable sense of pain, and this inflammation is so severe that the fingers literally stand an end.

It is obvious that the affections of the fauces and of the surface in this species, are of the inflammatory kind. My own experience leads me to conclude that the angina maligna is more inclined to appear in autumn; and that as the winter advances the disease assumes more of the character of the inflammatory scarlatina; but to this general tendency of the complaint there are exceptions.

In the angina maligna it is not in the throat only that uleers are observed, but on the inside of the mouth, on the edges of the tongue, on the lips, and on the cheeks near the mouth; the more purulent the discharge is from these ulcers, the more favourable is the prognosis, and the reverse when the discharge is thin and acrid.

The eruption of scarlatina is sometimes retarded by particular modes of treatment, especially by the application of cold, and promoted by the opposite mode; the same result will sometimes arise from the same causes in small-pox and in measles. The eruption is not so critical as in small-pox, nor its repulsion so dangerous as in measles: when it appears it generally causes some slight remission of the febrile symptoms, but often there is little alteration perceived in the fever, in consequence of the eruption; pectoral symptoms of cough and oppressed breathing, are often observed throughout the whole progress of the disease.

In some instances the patient for six or seven days will be not quite well in health, and then the anginal and typhus symptoms will set in accompanied by all their peculiar severity; and that patient, who at first was hardly supposed to be in danger, in two or three days after the malignity sets in falls a victim to the complaint.

The symptoms of recovery, when the disease terminates favourably, will appear on the fourth or fifth day; but in some instances not so soon, especially in the inflammatory scarlatina, in which decisive marks of improvement will often not be discovered before the beginning of the second week.

The favourable change begins with the following appearances; the ulcers of the fauces and mouth become smaller and cleaner; the swallowing easier and less painful; the heat of the body diminishes; the efflorescence begins to turn paler and to scale

off; and the distress of the head to subside; the pulse becomes more full and slow; and sleep and appetite return.

Wherever the symptoms of angina maligna and typhus predominate, the danger is greatest, and always the danger is proportioned to the prevalence of those symptoms, especially of the gangrenous sores.

Where vivid efflorescence and swelling of the skin alone exist, or exist with a slight combination of the anginal symptoms, the danger is trifling. In the inflammatory scarlatina with vivid efflorescence, swelling and pain of the skin, head-ach, and inflammatory sore throat, the danger is not as great as in the putrid sore throat; but it is greater than in the mild scarlatina consisting almost entirely of efflorescence; and in general the colour of the skin is palest, and its swelling slightest, where the throat is most dangerously affected.

It is remarkable that from the same contagion, and amongst individuals of the same family, the symptoms of gangrenous angina, and inflammatory scarlet fever are blended in every degree and variety; and in some individuals one is found to exist pure and complete, without any combination of the other.

CAUSE.

### CAUSE.

The cause of scarlatina is a specific contagion, and all persons are liable to its attacks, of whatever age, or temperament, or constitution, or sex; and though it does not often visit the same person a second time, yet there are several instances of those being attacked again who have had it already.

The persons most liable to it are the young and delicate; and children, of all others, are most frequently attacked by it; as indeed they are by all kinds of eruptive fevers.

#### DIAGNOSIS.

Scarlatina, by attending to its symptoms and to the prevailing epidemic, can generally be distinguished from all other disorders. From angina tonsillaris, or common inflammatory sore throat, the malignant scarlatina is distinguished by low fever, sickness, prostration of strength, loss of appetite, by the sanious and acrid discharge, and by the ash coloured and gangrenous appearance of the ulcers. The inflammatory scarlatina differs from the common inflammatory sore throat, by the high fever, the head-ache, the delirium, and throbbing of the temporal arteries. And all the varieties of scarlatina are distinguished from

the inflammany sore throat, by the efflorescence. In angina tonsillaris too, the pain of the fauces and the difficult deglutition are the urgent distress; but in scarlatina the whole system is affected.

From measles it can be distinguished without much difficulty, by the catarrhal symptoms, and intolerance of light, which are found uniformly in measles, and by the appearance of the eruption. In measles the eruption appears slightly marked, first on the face, and by degrees it spreads over the whole body: but in scarlatina it forms suddenly over the whole of the body, and most commonly is less florid on the face. In scarlatina the eruption spreads over the skin, so as to give it an uniform colour; but in measles the eruption consists of a number of clusters irregularly shaped, but commonly composed of segments more or less circular or curved, and these clusters are formed of points closely connected, whose elevation above the skin on the face, and often on the neck and breast, is discovered by the touch, and in many instances by the naked eye: these clusters are sometimes considerably inflamed, and sometimes but obscurely; and the interstices between them retain the natural colour of the skin. Sore and watery eyes; sneezing; a running from the nose; soreness along the chest, and a husky cough, occur in measles, and form its most striking and most dangerous dangerous character: but in scarlatina, though a slight inflammation of the eyes and catarrhal symptoms may occur, they are in general trifling, and by no means the leading appearances which fix the attention of the observer.

## PROGNOSIS.

Scarlatina, in general, is not fatal before the third day, and the prospect of recovery is the greater, as the disease is protracted beyond that day, and if it passes the eighth or ninth day, the patient will most commonly recover. The dangerous symptoms (as already noticed) are those of typhus, and angina maligna; that is, great heat and prostration of strength; low, quick, fluttering or compressible pulse; head-ache; tremors; early and great delirium; flushing of the face; and vomiting. The worst of all are dark or brown ulcers on the tonsils and internal fauces: dyspnœa; swallowing difficult or nearly impossible, and causing the liquids to run out by the angles of the mouth; stupor; and offensive watery purging: this latter class may be considered most commonly fatal. Favourable symptoms-When the fauces are but slightly affected, and the head free from uneasiness, there is little danger: an early, copious, and florid eruption is a favourable sign, and the repulsion of it is dangerous; gentle sweats breaking out in the progress of the complaint; little or no general fever; the breathing and swallowing remaining free or but little affected; the sloughs falling off and leaving the parts underneath clean and of an healthy red colour: the swelling of the neck subsiding: all these are favourable symptoms.

When it is announced that the swallowing is very difficult, and that there is a foul watery purging, the prognosis is unfavourable: and in all cases of scarlatina, the prognosis should be guarded until decisive symptoms of improvement occur; because instances are often met with, where the disease goes on mildly for several days, and where suddenly violent affections of the head, such as come and delirium come on, and kill in the space of a few hours.

Persons of delicate habits; of shattered constitutions; and scrophulous children, perhaps, most of all are those whom scarlatina attacks with greatest severity.

## CURE.

The cure in scarlatina is to be directed by the state of the fever, and of the inflammation of the throat. General blood-letting in this town is seldom admissible; and in some cases where it was tried it proved hurtful.\*

\* During the epidemic scarlatina of 1798 I was called to see a boy about ten years old labouring under the angina maligna:

If called in early in the complaint, an emetic is our best remedy. Ipecacuan in wine or powder is one of our best emetics; when a rough effect is not to be feared, a small quantity of tartar emetic might be added to the powder, or dissolved in the wine. Emetics timely administered are sometimes known to cut short the complaint: they discuss incipient inflammation; cause a determination to the surface and soften the skin; carry away the slime of the fauces and the foul contents of the stomach; and in these several ways contribute to remove the disease. The morning after the exhibition of the emetic, or immediately, when an emetic is conceived to be improper, the bowels must be freed from their morbid contents; with this view, the medicines, No. 1, 2, or 3, in adults, and in children, the eathartic powder, No. 52, may be given, (this powder will generally prove a moderate dose from the age of ten to fourteen years, and may be modified for those who are younger or older

maligna: he had been just bled before I saw him, and was much weaker after the bleeding; and the anginal symptoms were not in the least relieved. I ordered him cordials, such as wine, Peruvian bark with sulphuric acid, gargles with muriatic acid, and fruit jellies: I paid strict and regular attention to the state of his bowels, and though his improvement was very slow, he recovered. Had he not been bled, I am convinced his recovery would have been less difficult and more rapid.

in proportion to their age and the vigour of their constitution.) These medicines should be followed up within four or five hours with an enema; or with the purgative mixture, No. 25, or with a dose of castor oil in some pleasing water, or combined with some purgative tincture, as tincture of senna, or jalap, according to circumstances: this plan being persevered in until the bowels are freely opened. If the complaint be the angina maligna, the greater delicacy of the patient requires that some caution should be used in the dose and quality of the purgatives; but even in this modification of the disease, the bowels must be kept regular, and the foul colluvies daily removed: but in the inflammatory scarlatina, the use of active and frequently repeated purgatives is necessary; in the latter too, the head had better be kept shaved and washed daily with spirits, or with camphorated spirits of wine: but where there is violent head-ache, delirium, or great drowsiness, the head should be covered with a large blister, and the discharge from the blistered part kept up with savin or blistering ointment, until those symptoms subside. In cases of violent inflammation of the throat, leeches ought be applied to the throat, and if the inflammation still continue distressing, a blister should be laid across the throat, after the leeches have been applied. The leeching and blistering of the throat not only carry off the distressing

distressing pain and soreness of the throat, and relieve the swallowing, but they also help to remove the pain of the head, and thus cooperate powerfully with the blisters and embrocations applied to the head itself. In some instances, the severity of the complaint is so great, that a repetition of the leeches and blistering will be required, and in cases of such alarming danger, we ought not to hesitate to repeat those remedies which are best calculated to remove the distress. The purgatives should be given regularly, so that a free passage of the bowels be produced at least once a day; and in scarlatina, the contents of the bowels are commonly so foul, that from their appearance we may be enabled to form a judgment of the propriety of altering, or omitting, or persevering in the purgative plan. Throughout the whole of the disease gargles are useful: they serve to cleanse the internal parts of the mouth and fauces, to enable the patient to relish the flavour of food and drink, and also to remove the sickness at stomach. Of gargles there are great varieties, of which some specimens are to be seen in No. 53, 54, 55, and 56, the two first are best adapted to the inflammatory scarlatina: the other two, viz. 55 and 56, to the putrid sore throat, in which these gargles are attended with the additional advantage of correcting the putrid foulness of the throat, and of disposing the parts to more healthy action: the gargles must be freely used and injected with a syringe gently and carefully, lest they pass into the wind pipe; the safest of all methods perhaps consists in dipping some spungy substance in the gargle, and touching with this the diseased parts; these expedients are principally indicated in young subjects who cannot use the gargles themselves.

For children honey of roses and borax make a good gargle in ordinary cases; currant jellies are very useful, they act as a mild gargle, and they are slightly nutritious, cooling, and antiseptic. In the putrid sore throat, along with attention to the regularity of the bowels and the use of gargles, wine must be freely allowed, and likewise the Peruvian bark, which might be combined with some bitter tincture and acid, as in No. 17, and if the irritation, pain, and difficulty of swallowing be severe, along with the bark preparation, the opiate liniment No. 57 will be proper; it may be frequently and freely rubbed to the throat and jaws externally. In children sometimes the bark preparations cannot be taken by the mouth, then they may be given in glysters and in small bulk. Tincture of myrrh, honey, vinegar, and sulphuric acid may be variously combined to form agreeable and antiseptic gargles and cordials. In putrid purging, along with the above method, opium, barm and starch in glysters should be administered.

Bathing

Bathing the feet with warm water at bed time, or fomenting them with warm stupes is a very useful practice, because it tends to relieve the head and soften the skin; it might therefore be freely used from time to time. Should there be oppression of the chest and cough, a blister between the shoulders will be useful; and the expectorating mixture No. 15 taken by spoonfuls will relieve the cough; but when intended for children, the proportion of the opiate must be greatly reduced.

The food ought to consist principally of ripefruits, of roasted apples, of sago, flummery, gruel, &c. but where the patient is much exhausted and the stomach can bear it, broths, jellies, eggs and bread might be allowed. The drink might consist of any mild slightly nourishing liquor, as whey, barley water, milk, buttermilk, lemonade, oranges, &c.

SEQUELÆ, or CONSEQUENCES OF SCARLA-TINA.

Scarlatina is disposed to leave dregs behind it which are often more alarming than the primary complaint. These are dropsical collections in some part of the body; these collections are sometimes formed in the cellular membrane, producing general anasarca or dropsy of the surface, and this is the most usual; but those collections

may form in the chest, in the belly, or in the brain.

For those dropsical sequelæ the following medicines answer in general, viz. calomel and squills taken at bed time, and a diuretic and laxative electuary the following morning. Thus two of the pills No. 43 may be taken by a grown person every night, and a tea' spoonful of the electuary No. 5 every follwing morning. According to the purgative effects of these medicines, they may be modified so as not to purge too severely, but at the same time to keep up a regular state of the bowels; thus should the patient be purged smartly after the pills and electuary, the dose of the pills should be omitted the following night, and perhaps the electuary the morning after; but if from a dose of the pills and of the electuary, the bowels are not sufficiently moved, the dose of the electuary should be repeated every two or three hours until a stool be procured. To children the powder No. 12 may be given at bed time, with a little cator oil the following morning if necessary; the dose of both being adapted to the age and circumstances of the patient.

Sometimes it happens that the patients have had little suffering during the primary complaint, that they had neither pain nor distress of any sort, and that the only appearance of disease was the general efflorescence, but that in a few days after the eruption scales off, a restlessness and heaviness come on, sometimes attended with a slight swelling of the face; that they will loathe their food, and feel an uneasiness to move or exert themselves: a brisk purgative will relieve for the time; and they will appear well; but soon again they feel a return of the same combination of unpleasant symptoms: and these successions of sickness and convalescence will take place, until great distress and pain of head set in, encreased in severity at each succeeding relapse: and the little/patients at length die convulsed. In cases of this sort, before the head be engaged, we ought to have recourse to those remedies which we believe most effectual in the insipient dropsy of the brain. The whole head ought to be shaved, and then covered with a sharp blister, which might be left on for forty-eight hours, and the blistered parts afterwards dressed with savin ointment, or cintment of powdered cantharides, so as to keep up the discharge until the threatened danger be removed. Doses of calomel, or of calomel and James's powder, or of calomel and antimonial powder, suited to the age and strength of the patient, should be exhibited frequently, so as to keep up the free state of the bowels: and if the symptoms of affected brain be alarming, we should rub mercurial ointment every night, until a salivation come on; and thus proceed until all appearances of danger subside.

It will appear manifest, from a consideration of the dregs which this complaint is apt to leave behind it, that in our treatment of the primary disease, we should not only attend to the symptoms under which the patient at any time labours; but that we should have in our contemplation also the consequences which may follow, and regulate our practice with a view to prevent their occurrence. There is serious reason to apprehend water on the brain may follow, where, in the progress of the disease, high fever, and symptoms of violently attacked brain exist, as severe head-ache; delirium; great drowsiness; and restlessness. In such cases, therefore, the treatment recommended for the removal of those symptoms, such as leeches, blisters, and smart purging with mercurial medicines, will be extremely proper, as they not only have the effect of banishing those alarming symptoms; but also as they are the most powerful means of averting the treacherous and fatal consequences which might ensue.

## OF THE GRIPING AND IRREGULAR BOWELS OF INFANCY.

Children are very subject to bowel complaints, especially those who are nursed in large towns, where they generally want pure air, healthful exercise, and often nourishing and wholesome food. This disease I have denominated griping and irregular bowels, in consequence of the leading symptoms by which it is marked, such as the following:

# SYMPTOMS OF GRIPING AND IRREGULAR BOWELS OF INFANCY.

Loss of appetite; loaded tongue; often a swelling and pain of the belly, pointed out by the children pulling up their knees to their belly; they become fretful and restless; the flesh is soft; the hands hot; the lips dry; the complexion mostly pale, but sometimes flushed, and that on one cheek more than the other; the breathing is quick; the sleep interrupted and unrefreshing; the bowels slow, and the stools mostly bilious, of a green, brown, or black colour, and consisting only of lumps, or of lumps mixed with slime, and of a very fætid and unnatural odour; but in many instances they are of a whitish or clay colour, without any apparent admixture of bile, and of a smell equally foul with the others: the breath, which is very sweet in children, in this complaint becomes offensive: a cough in a

great many cases accompanies the above train of symptoms, and indeed the attack is often caused by exposure to cold or damp weather. In severe attacks, vomiting and sometimes hiccup add to the suffering of the little patient. If this complaint occurs during dentition, it is uniformly rendered worse by the general delicacy of that period.

#### CAUSES.

The causes are hereditary delicacy; want of proper exercise; foul air of large towns; indigestible and improper food; bad nursing; damp and cold weather, particularly when the child is too slightly clothed. Whether one or more of these operate to produce the complaint, the effects are evidently a morbid secretion of the bile, and of the fluids of the alimentary canal: in consequence of this, the bowels are loaded with a collection of sordes, the irritation of which raises a general fever through the system, attended by the symptoms already enumerated. I think it of importance to fix the attention of the practitioner upon the immediate source of the patient's suffering, viz. the diseased secretions of the intestines and liver; because there cannot then be much hesitation about the quality of the remedies which are suited to the complaint.

CURE.

OTTO

Whether the bowels are constipated without any evacuation by stool; whether the stools are whitish, or dark coloured and hard; or whether there be an appearance of factid slimy purging; the indication of cure is the same, namely, to relieve the system from the acrid contents of the bowels; afterwards to correct the diseased secretions on which this acrimony depended; and lastly, by the use of strengthening remedies, proper food, and attention to exercise and clothing, to guard against a return of the complaint.

In treating of the diseases of children, some difficulty arises respecting the doses of medicines, which does not belong to adult age; because the quantity of the dose must be regulated by the age of the child, and by the nature of the complaint. During the first quarter after birth, half a grain of calomel, triturated with two or three grains of lump sugar, will be a medium dose.\*

<sup>\*</sup> The following will answer pretty well as a scale to regulate the quantity of calomel, which may be proper for bowel compliants during the two first years after birth; sometimes however we meet with children who will require much larger doses.

For the first quarter after birth, half a grain of calomel beat up with three grains of lump sugar.

For the 2nd quarter, 3 of a grain of calomel and 3 grains sugar.

This should be given as early in the day as possible, and in four hours after, a small tea-spoonful of castor oil, if the calomel powder has not yet operated; and in three hours afterwards, a purging glyster proportioned to the age of the child, and made up with brown sugar, or a little common salt and sweet oil, ought be thrown up, if the bowels have not been relieved within that time by the purgatives already exhibited. In one or two days after, the powder, castor oil, and glyster, if necessary, might be repeated in the same manner if the complaint still continue; and thus we may proceed at the interval of one or two days, to exhibit these medicines until the complaint is removed. In cases where the above doses will have little effect, it will be necessary to encrease the quantity of the calomel, perhaps by a quarter of a grain at every dose, until the proper operation takes place. In severe cases the exhibition of the above medicine will be necessary every day; and in mild cases it will be safe to allow an interval of two entire days. There are instances too where one dose of the medicine will remove all the symptoms and restore the patient to perfect health. Should the castor oil be nauseated, senna infusion or tea with some syrup of ginger will answer, and this infusion will also keep

For the 2nd half year, 1 grain of calomel and 3 grains sugar. For the 3d half year, 12 grain of calomel and 4 grains sugar. For the 4th half year, 12 grain of calomel, and 4 grains sugar.

the bowels regular on the intermediate days when the calomel powder is not given. The above treatment not only carries off the acrimony of the bowels, but also by degrees corrects the diseased secretions which produced it. Hot spirituous fomentations and flannels applied to the belly and stomach will occasionally assist in relieving the pain and griping of the bowels, until the morbid excrements are carried off. It will be necessary to keep the child comfortably warm during the whole of the treatment; and where too much exposure to cold has contributed to bring on the complaint, it will be highly proper to allow more clothing, and of a warmer kind after its removal.

From perceiving that robust children, under the favourable circumstances of regular exercise, cleanliness and good air, grow up healthy and strong, though lightly clothed; there is an impression very generally received that light clothing and considerable exposure to the air will in all cases make children hardy and strong. Very delicate infants have therefore been too frequently allowed to go almost naked, and that, in many instances, where they were exposed to impure and stagnant air, and deprived of the benefit of exercise. There cannot be a doubt that exercise in the open air is salutary to the delicate as well as to the robust; but to delicate children comfortable warmth in their clothing will be indispensible, though

though strong children may be lightly clothed not only wiith impunity, but with advantage. I have met with instances of delicate children, who from being trained according to this hardy discipline continued feeble and sickly, and frequently afflicted with bowel complaints; but who upon wearing shoes and stockings, and being in other respects comfortably clothed, immediately mended in their health; and afterwards from persevering in this habit uniformly and permanently improved in constitution and strength.

The patients upon recovering should have country residence if practicable, and exercise in the open air when the weather is favourable. As to food, the quality and variety of it must be suited to the age of the patients. In early infancy, the milk of a healthy nurse, who has been bred in the country in habits of constant industry and exercise, is the best food; afterwards, as they grow older, sound well baked bread and milk will be proper, and occasionally broth and a small bit of meat. The fashionable but pernicious indulgence of children generally consists in a glass of wine or punch, in sweetmeats, and in tea and coffee: these articles are all bad, and had best be entirely withheld, but if they must be given, like all poisons, the weaker they are, and the less of them that is allowed, the better for the child.

If the delicate child be treated according to this plan viz. fed with sound and appropriate

food only; exercised and kept for a long time daily in the open air when the weather is seasonable; and protected by warm comfortable clothing from the impressions of cold and damp; he may by degrees acquire a portion of health and strength which will enable him to resist the consequences of that light clothing to which at first he was unequal. After the complaint is removed the chalybeate powders No. 77 will be useful in improving appetite and strengthening the system.

## PURGING OF INFANCY.

Purging is very frequent in infancy, and is generally accompanied with foul bowels; in such cases the treatment recommended for the preceding disease, viz. griping and irregular bowels of infancy, will be most proper. Sometimes a purging attends dentition; warm clothing and proper food will in those instances be commonly sufficient to correct it; but if the stools are foul, a small dose of calomel will carry off the acrimony, and if the looseness still continues in such a manner as evidently to weaken the child, a tea spoonful of the absorbent mixture No. 82, taken three or four times a day, will help to check its severity and to improve the tone of the bowels. Sometimes a purging in infants is the consequence of cold acting upon the surface, and producing an encreased and morbid determination to the intes-

tines:

tines; the method of cure is similar to that recommended for the looseness of dentition, viz. warm clothing, one or two calomel powders to expel the acrimony; and, if there appears to be still a purging which continues to relax and weaken the child, the mixture No. 82 will generally remove it. There is a laxity of bowels peculiar to some infants attended by a few loose stools in the day; this state unless it appears to weaken the child should not be hastily tampered with, as it is often consistent with perfect health; but where the evacuations by their copiousness and frequency manifestly injure the health and strength, the occasional use of the mixture No. 82, along with proper attention to clothing and exercise will mostly effect a cure.

## OF THE FITS OR CONVULSIONS OF CHILDREN.

Children in consequence of the great delicacy of their nerves are subject to convulsions from various causes, such as worms, dentition, smallpox, indigestion, and watery effusions on, or dropsy of the brain. The convulsions attending the eruptive fever of small pox commonly disappear when the eruption breaks out, an event which the warm bath is found to accelerate. The convulsions of dentition subside when the tooth appears; but we should not wait for the spontaneous cutting of the tooth, because in many instances that process is slow and the fever and

pain accompanying it might at length prove fatal; there is an additional motive too for exerting ourselves to put a stop to the convulsions, because in my opinion the convulsions of infancy, from whatever cause, if frequently repeated or long neglected, have a tendency to bring on dropsy of the brain, and that in persons in whom there had not been a vestige of this complaint previous to the convulsions. In cases of dentition therefore the gums should be freely cut down to the tooth, an operation often attended with sudden and extraordinary relief. In the convulsions produced by the irritation of worms, it is manifest that the expulsion of the worms and of the slime in which they nestle must be the most useful practice, vide worms, page 153.

Convulsions are likewise caused during infancy by indigestion, costiveness, and a collection of acrid excrements in the intestines; and if neglected they will at length return at very short intervals and infallibly kill. In a few of those cases of early fits, the cause is dropsy of the brain, but in the greatest number there is no dropsy, at least in the beginning of the complaint. Of this disease the following are the symptoms:

## SYMPTOMS.

All the bad symptoms of griping and irregular bowels in children occur in this complaint, such as loss of appetite; loaded tongue; disturbed sleep; fretfulness; fretfulness; foul breath; great heat of skin; costiveness; hard dark-coloured or whitish stools, very factid and offensive, and sometimes a scanty and putrid purging; along with these, convulsions appear and return at uncertain intervals; but the more frequent they are, and the longer they continue, the danger is the more alarming.

#### CURE

In cases of convulsions the doses of purgatives require to be encreased considerably above the ordinary doses for other complaints; we must not hesitate therefore about the liberal exhibition of these medicines, because the danger is not subdued until the torpor of the bowels is overcome, and a free discharge by stool is procured; and upon copious evacuations taking place all the symptoms begin to vanish.

Two grains of calomel, beat up with four grains of lump sugar and one grain of powdered cinnamon, will be a proper dose for an infant in this disease; this is a very agreeable powder, and may be given in a little syrup or honey, or fruit jelly, &c.

In the course of two hours after taking the powder, a tea-spoonful of castor oil will be proper to quicken and assist its operation, and unless a free free motion be procured in two hours after taking the castor oil, a smart glyster will generally succeed in bringing away the medicines already exhibited and a large excrementitious stool with decided relief to the patient. The child in the mean time should be occasionally immersed in the warm bath; or spirits should be applied along with hot flannels to the stomach and belly; these steps procure temporary relief, until a more decisive and permanent advantage is obtained by the operation of the purgatives. If the treatment just mentioned fails to evacuate the bowels and to mitigate the convulsions, it will be necessary to go over the process again without delay, and to encrease the dose of the calomel as the practitioner may think necessary; perhaps half a grain or one entire grain more of calomel may be added. Should the castor oil be nauseated, some infusion of senna warmed with syrup of ginger and some tincture of senna may be substituted, and will answer pretty well; but where the castor oil is borne by the stomach, it is a more suitable medicine. This practice must be repeated the following day, and continued day after day until the bowels are brought to a natural state, and the fits disappear; but in proportion as the symptoms become milder, and the health returns, the doses of the calomel must be lessened, and the enema, and by degrees the castor oil omitted. In cases where the fits return at short intervals, we must begin