George M. Barfus

Bedehaus am Meile
On Scarlet Fever.

Scarlet Fever, as defined by Dr. Copland, is "an infectious continued fever, on the second day of which, or sometimes later, a scarlet efflorescence appears on the face, neck, pharynx, and on the face and neck; spreads over the body, and commonly terminates in desquamation from the fifth to the seventh day; the fever being accompanied with affection of the kidneys, often with severe disease of the throat, or of some internal organ, and sometimes followed by impetigo, and occurring only once during life."

This disease belongs to the class Vaccinomata, generally occurs in the form of an epidemic; and is mostly seen among children. In some epidemics the disease is very mild; in others one of the most deadly of all maladies. It has been divided into three -- by some authors into four -- different forms or varieties. 1. Scarletina Simplex. 2. Scarletina Auginosa. 3. Scarletina Maligna. 1. Scarletina Simplex. This is the mildest form in which the disease occurs. Its course has been divided into three stages or periods.
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This disease belongs to the class Exanthemata, generally occurs in the form of an epidemic, and is mostly seen among children. In some epidemics the disease is very mild; in others one of the most deadly of all maladies. It has been divided into three — by some authors into four — different forms or varieties.

1. Scarlatina Simplex.
2. Scarlatina Anginosa.
4. Scarlatina Simplex. This is the mildest form in which the disease occurs. Its course has been divided into three stages or periods.
The first is that of invasion; the second that of eruption and the third that of degeneration.

The first stage (invasion) is generally ushered in by a feeling of weakness about the limbs and back, chills, shiverings, or jitters, lassitude and want of appetite, or loathing of food; this state being quickly succeeded by increased frequency of the pulse, headache, increased heat of skin, thirst, nausea, thirstiness, and scanty, high, colored urine, and redness of the fauces and tongue. These symptoms may be present in a very mild form, or they may be very much aggravated; the pulse being sometimes very rapid and full, the headache very severe, drowsiness, restlessness and delirium, or even convulsions may ensue in the very young. The nausea is frequently accompanied with vomiting.

The tongue is coated with a white fur and the elevated red papillae project through it. The redness of the fauces may extend to the nose, causing irritation, and sometimes bleeding takes place from the mucous membrane. Sometimes the redness and irritation may extend as far as the conjunctiva of the eye causing intolerance of light. The urine besides being scanty and high colored may also be albuminous. Generally, this stage lasts about two days but it may be longer or shorter.

The second stage as have stated commences with the eruption—on the second day as a general rule the efflorescence consists of an infinite number...
of minute points on a rose-colored ground. It appears in the form of irregular patches which are first seen on the face—especially on the cheek and neck. They sometimes, but very rarely, commence on the trunk and extremities and gradually extend to the other parts of the body, until they coalesce and cause the skin to assume the characteristic scarlet tint, which has been compared by some to the color of a boiled lobster, by others to scarlet cloth. The exception generally reaches its height on the third or fourth day and is generally most bright in the groins and flexures of the joints. The temperature of the skin varies from 104° to 108° of Fahrenheit scale and the face is sometimes swollen. During this stage of the disease the patient's countenance is flushed, anxious, and suffering; the lips are brilliant and congested, delirium and restlessness often occur at night, and the patient, pharynx, tonsil, and other glands are still red and beaded (the humidity being in some cases so great as to cause occlusion of the throat). The tonsils are covered by a thin, soft, and whitish exudation of lymph. The secretion of saliva is scanty and tenacious. The tongue sometimes loses its white coat in this stage leaving it red;—sometimes smooth, atif varnished;—sometimes having still the elevated papillae and presenting a strawberry-like appearance. The thirst is now very urgent.
The bowels are generally active although slight diarrhoea doses occasionally intervene with chilly pains. The urine is scanty and high colored still and sometimes albuminous. The respiration is hurried and the breath hot. The pulse is full, compressible and very rapid and the patient exhibits a peculiar odour which is readily recognised by the experienced observer. After five, six or eight days, the eruption begins to take on a purplish tint, and the face, eyes, ears, nose, and mouth become more and more reddened. The face and tonsils still continue red, but the latter lose their swelling, and sometimes it is not till this period that the tongue loses its coating and now begins the third stage. This sets in with desquamation of the cuticle which takes place generally about the fifth day, and in the same order in which the eruptions appeared. With the eruption the other febrile symptoms generally subside; the pulse becoming less frequent and full, the tongue flabby and red, and sometimes a copious discharge of turbid urine, a return of the tenderness in adult females, a copious perspiration having a strong and peculiar odour, or by slight epistaxis or diarrhoea occur.

**Scarlatina Arginosa**

This variety differs from the former principally in the intensity of the sore throat, and in the severity of the febrile symptoms. It sets in with rigor and stiffness about the joints of the throat, and lower jaw.
The pulse becomes very rapid but not very full generally, the respiration becomes hurried, the thirst urgent, the faces very red and the tonsils red and swollen. There is a thick, viscid, whitish mucous attached which covers not only the fauces and tonsils, but also extends to the pharynx and oesophagus. Very rarely if ever to the larynx; this mucus sometimes becomes tinged with small spots of blood coinciding on the tonsils which are apt to be mistaken for small ulcers; the more so as the breath sometimes becomes fetid. But if the mouth be washed with a gargle, or the viscus desquamated off with a probe, the mucous membrane is found to be entire. The voice is hoarse and very characteristic, and there is difficulty of deglutition. Sometimes also there is present a troublesome Cough. The tongue is covered with a thick brown fur and the red papillae are seen protruding through it. The bowels are generally empty; sometimes diarrhoea is present; the urine is scanty and highly sometimes bloody. There is generally nausea and vomiting. The eruption does not appear so soon nor so regularly in this as in the last variety of the disease. In this it is observed on the third fourth or fifth day. It does not become so generally diffused over the body as in Scarlatina simplex, being confined principally to the face, back, flexures of the joints, wrists, hands and feet.
The skin is very hot, the temperature reaching from 104° to 108° (Fahrenheit scale). In this variety, the inflammation of the skin is attended with decided turgor of the cellular tissue, especially of the face and fingers and flexion of the eyelids, and edema and ecchymosis are hardly improved. The entire duration of this variety is longer than in Scarlatina simplex, and desquamation is less regularly performed.

Scarlatina Maligna differs from the other varieties in the character of the fever, of the sore throat, and of the eruption. In this variety, the disease begins with the fever from the very beginning, more of the typhoid type than in either of the others. It ends with a shivering fit which is quickly succeeded by burning heat of skin, an insufferable thirst, quick, but small, Pulse, and vomiting, lachrymation, delirium, and sometimes coma. The tongue is covered with a dark brown fur, and dry; the throat is also dry and covered with aphthous elevations which are surrounded by a livid base, quickly becoming dark which bursting disclose an excavated surface of adherent and granulous appearance. The teeth are coated with white; there is an acid discharge from the nostrils. The eyes are watery, smart and injected. The breathing is laboured and heavy, owing to the collection of mucus in the fauces; and deglutition is rendered difficult from the same cause.
The purpose may be questionable as fast as a good rule. Death sometimes precedes 18 - 24 hours.
The urine is sometimes bloody. The eruption sometimes comes out later in this variety and is uncertain in its duration; but after it has appeared it assumes a dark or livid tone. In some cases it comes out, remains for a few hours, and disappears, and reappears perhaps after a few days when it follows the same course. Very often death takes place in three or four days, from the severity of the symptoms causing gangrene of the perianal glands or some other part of the alimentary canal. In other cases in which the early symptoms have not been remarkably severe, the aphthous state of the mouth and throat all at once assumes a alarming aspect and carries off the patient at the close of the first or beginning of the second week. When the disease continues beyond this time death takes place rapidly by the disturbed state of the capillary system and the perversion and extinction of action with which this state is accompanied, then in consequence of any local malignity or mortification. In such cases the pulse continues weak, rapid, and small; respiration is languid and oppressed; frequent fluid stools of hemorrhoic matter are discharged from the bowels; blood is discharged from the mouth, throat, rectum, bowels or even the kidneys; petechial spots and vesicles appear on the skin, and the patient is destroyed by the
Combined effects of capillary disorganization in several different parts and organs. When the immediate symptoms of danger are over, in this disease, the convalescence is apt to be retarded by retained ulceration of the fauces, extending to contiguous parts; suppuration of the glands; inflammation of the internal ear; and swelling of the lacrimal and forniceal glands.

Secondary Diseases. After an attack of lasting duration in the patient, during convalescence, is liable to be affected by various diseases, as, struma, boil, sthumous ulcer, diseases of the scalp, sore behind the ears, serofoulous swellings of the cervical glands, and upon the lips; chronic inflammation of the eyes and eyelids. But these are not peculiar to scarlet fever, in as much as they are sometimes seen to occur during convalescence from smallpox and measles.

Retro-pharyngeal abscess. Dr. West mentions an occasional consequece of scarlet fever as Dr. Watson has noticed again in the joints, resembling subacute rheumatism occurring after this disease, although he has never seen the heart affected in such cases. Dr. Alienor has directed attention to pericarditis as a complication of scarlet fever. Dr. Peel mentions two cases of pericarditis; three of acute, and one of chronic endocarditis. After out of thirty-four instances the disease of the heart was traced to scarlet fever.
The cardiac symptoms did not manifest themselves in the acute stage of the affection, but during desquamation, accompanied by fever and uneasiness which was slight. In two cases of peri-carinalis, dropsy came on in consequence of the heart disease. But, of all the secondary affections liable to occur after this complaint, there is no attack frequent or uncommon as varicellae — Infrequent, indeed, is this, that Cullen makes it in his definition of the disease. It belongs to the class of febrile diseases. It does not seem to have any relation to the exanthemata, being seen more frequently after a mild than after a severe attack. It is also much more frequent in some epidemics than others, and its fatality is liable to as much variation as its frequency. The fact of its being more common after a mild than after a severe attack of the disorder, however, is not conclusive proof of that it is more common after the former than the latter; for, it must be remembered that there is usually less care taken to prevent the injurious effects of the predisposing cause of dropsy after a mild attack of scarlet fever, during convalescence, than after a severe one. It is now universally admitted, that the most common cause of the anasarca is cold applied to the surface of the skin during the course of desquamation, and there is as little doubt that keeping the atmosphere...
+ 2,

[Handwritten note: "I have seen it at 16. 10 6030"]
atmosphere in which the patient is, at an uniform temperature extremely favors it. It seems also to be generally admitted that adopting asthma
hating and bracing causes dropsy. The mode in which the cold acts seems to be by checking
the cutaneous perspiration, and throwing additional strain on the kidneys, and causing congest-
ion of these organs, thereby giving rise to
the disease termed by D. Johnston Præcamination
Epithetitis, D. West calls it Alburnious Epithetitis
Those who have much deexpansion are most
liable to the disease according to Pliny, and
it is more common in winter than in summer,
probably from the greater liability of being
exposed to the injurious influence of cold at
that season. When deexpansion ceases the
spirit from dropsy is over. The period after
which the dropsy occurs varies, it is sometimes within
the first week, seldom later than the third
When there was no dropsy after the fourth week
D. Wells ventured to state that it was no longer
to be dreaded. It is seldom seen but in young
children. D. Wells has never seen it after the age
of seventeen. Of ten cases seen by O. Black all
were in children not above ten. He in persons se-
respectively aged two and sixteen. We cannot however
infer from this that the liability to dropsy decreases
spontaneously because fewer adults take their
scanty spirits than children and adults who take some
spirits
don't take dyspepsy, of course fever adult must have dyspepsy. The approach of Dyspepsy can be distended by daily examination of the urine. Its approach is also frequently preceded by languor, feverishness, feverishness, nausea, vomiting, and restlessness. The skin is dry and hot, the process of degeneration arrested, appetite lost, and thirst considerable. The pulse at the outset is slow, then as the disease advances it becomes frequent. The urine as in other febrile diseases is troubled, bloody, albuminous; it is diminished in quantity, but the desire to void it is more frequent than natural. These symptoms having lasted two for a few days, the face becomes swollen and pale, and as a general rule, according to the amount of swelling, so are the severity of the general symptoms; and in those cases which terminate fatally, there is generally a considerable amount of effusion into the different cavities of the body. In mild cases the fever is generally inconspicuous, and the appearance slight, and after a few days of slight indisposition the patient recovers his health. In severe cases the swelling extends to the abdomen, and when most parts of the body. The elevation of urine is very scarce; sometimes though rarely pain in the back is complained of: most frequently in the lumbar region. The patient, however, often almost entirely on the complications for if they don't destroy the patient amendment takes place in a week.
or her days. The wine gradually becomes greater in quantity and containing less albumen, then the auricular diminishes and the patient gradually regains his health occasionally however the wine remains slightly albuminous long after all other traces of the disease except delirium have disappeared. Sometimes in the course of the disease headache, dilatation of the pupils, convulsions, or palsey come on indicating effusion into the head. Much more frequently however the plaque are the seat of effusion or pneumonic surrounded and carried off the patient. On making a more minute examination of the wine in such cases we find that its construction is changed in the following manner. It is deeper in color quickly becoming turbid on cooling; has a strongly acid reaction; second somewhat the normal specific gravity. It is at first rendered clear by heat, but again becomes cloudy as the albumen is coagulated and falls down as opalescent precipitate. If the attack be severe the wine is of a brown or rancid color; or deep red or coffee color, and throws down a reddish brown precipitate which does not entirely disappear when heated albumen is present in great abundance. The dark color is due to the colouring matter of the blood. Sometimes blood is present in great abundance, and the case is for a while one of
Maturation - This state, however, is usually transient; lasting only for 36 to 48 hours. It always indicates a serious case. "But," says Dr. West, "of all the indications presented by the urine, none is of such constantly evil import as a marked diminution in the quantity of that secretion, especially when that diminution takes place suddenly. And in whatever other respects the state of the patient may differ, complete retention of urin for a period much exceeding 12 hours almost invariably announces the approach of death." A microscopic examination of the urine in such cases usually discloses crystals of hippurate of ammonium, minute corporules, epithelial scales, casts of urinary tubes, and in many cases blood corporules but little altered. These disappear as the symptoms abate and the quantity of the urine increases, but albumen, as noticed above, may remain for a long time present.

The alterations found in the kidneys are short the following: In slight cases the kidneys are swollen, dark, heavy, and gorged with clotted blood, but not otherwise altered.

In the more advanced stage the surface is pale, mottled, and sometimes distinctly granular. Spots of vascularity are dispersed over it. On section being made, the cortical substance is found of a pure fawn color. The tubular parts...
are deeply infected. In short, the appearances are those of the second stage of Bright's disease. The changes of texture are further shown by their being easily Lacerable under the finger. There are no cases in which the appearances presented by the third stage of Bright's disease are found.

**Diagnosis**

The only disease likely to be confounded with scarlatina is measles; but they are easily distinguished by the following differences:

1. The period of incubation is longer in measles than in scarlatina: being 14 days in measles, 3 days in scarlatina.

2. The eruption appears on the 14th day in measles, and on the 3rd day in scarlatina, as a general rule.

3. The eruption appears first on the trunk in measles; on the face in scarlatina. And the color of the eruption is also different; that of measles being compared to a raspberry; that of scarlatina to a boiled lobster: and in measles the rash is more elevated than in scarlatina. In measles the papules are collected into semilunar clusters; in scarlatina, the redness becomes universal.

4. In scarlatina we have breathing, cough, and delusion from the eyes and nose. In scarlatina we have not, at least not in the outset of the disease; but we have sore throat which is not present in measles.
Diagnosis. - Carcinoma simplex, in a well constituted subject who has not recently suffered from acute or chronic disease of any kind, is without danger. A mild form of the disease however may become dangerous by the overshadowing of the Exanthema, occasioned either by a stimulating plan of treatments that is by the too early employment of strong lathing food, or by exposure to cold. Exposure occurring at the moment of the excision is reckoned an favourable symptom.

The extent and severity of the throat affecting the character of the prevailing epidemic, and the pulmonary or cerebral complications that may supervene, are the chief indications by which we form our prognosis. Carcinoma in juveniles or women is always a very serious malady and involves a very gloomy prognosis.

Pathology. - The mouth, fauces, stomach, and rest of the intestinal canal usually present a red and injected appearance, varying according to the amount of inflammatory action occurring during life. There is sometimes pus found in the tonsils, and the glands of Peter and the generality of the intestinal follicles are swollen, and ecchymoses is found in the rest of the intestinal Canal. Sometimes the backache and atonia have an in- flamed and red mucous membrane.
The vessels of the cerebral and spinal plexuses are sometimes formed infected, and have retropensal blood in the interstices, and the lateral ventricles filled with some the blood is usually semi-clotted, of the appearance of gooseberry jelly, or often albumo-
erous fluid; and the coats of the vessels are stained by it. The texture of the heart and kidneys are often softer than muscular, our easily torn; sometimes are met with secondary inflammation of the joints, which may go on to the formation of pus. The pericardium is sometimes affected.
Pneumonia also is of frequent occurrence, this it runs its course without almost any signs which lead us to suspect its presence. The phenomena in the living body and the appearance left by its action in the dead body of Craige, may Without lead to the following inferences on the nature and various forms of Leukemia. The morbid process which gives rise to its symptoms, consist in an overloaded or inflammatory condition of the capillary vessels, of the outer surface of the cutaneous corion, and the corresponding surface of the mucous corion. This overloaded condition of the cutaneous and mucous capillaries may vary in degree in both, and may alternate from the capillaries of the one to
Those of the other 1%. The capillaries of the cutaneous corium may be much affected without correspon-
ding distension of those of the mucous corion, which in some instances may not be affected at all. Either case will constitute the simple form of rash fevers in different degrees. The capillaries of the cutaneous corion and those of the mucous corion may be equally affected or those of the cutaneous corion may be dis-
tended while those of the mucous are very much distended. Either of these cases will con-
stitute the so-called rash fever in various degrees of severity. Lastly, when the Capillaries of the mucous corion in general are extremely or inordinately affected with or without af-
faction of the cutaneous Capillaries, it will form the extreme case called by practical authors
malignant scarlet fever. In this case the inordinate affection of the capillaries has a strong and almost irresistible tendency to disorganization.

Treatment. This, for the sake of convenience, may be divided into two divisions—First Preventive and Second Creative Treatment.

1st Preventive. Various substances and means have been recommended with the view of pre-
serving the infection of the cutaneous poison. Dr. Guthrie supposed that the poison first
makes its lodgement in the mucous corion.
by the subcutaneous membrane lining the nose and jaws, and that those who are exposed to the infection should frequently spit out the mucus that collects in the pharynx, and promote the discharge from the nostrils. He further advised those who had inhaled the poison and had experienced the precursory symptoms, immediately to take an enetic, frequently to wash the mouth and jaws with soap-leys diluted with water, and to apply something up the nose that will make them sneeze. After the operation of the enetic, he recommended the patient to go to bed and drink plentifully of wine, with spirit of Hartshorn. He states that a large experience enables him confidently to assert that if these precautions be attended to, the infection will be either altogether removed or be very trifling in its consequences. In the last edition of his work, Dr. Withering adds that after long experience, he believes that the progress of the infection may be stopped in almost every house by attending to the following precautions. Preventing intercourse between the sick and healthy members of the house in which the disease is present; allowing separate floors to each; and by plunging the linens worn by the infected into warm water immediately after being removed from
the patient. — Dr. Sims found great benefit from Rhubarb as a "stomachic" taken in the morning in such quantity as to produce one loose motion in the day. Calomel was recommended by Spain and Bliig for the same purpose. Thudichum advised Calomel to be combined with the golden sulphuret of antimony. Eschol believed in the efficacy of emetics as advised by Dr. Withering especially when followed by draughts of seven waters. Hale recommended the mineral acids. Captain Dr. Copeland thinks, should be added to the list especially when combined with small doses of Commiphora and Quinine. Last, but not least, in the list of prophylactics is Belladonna. Hahnemann of Homoeopathic notoriety, having remarked that Belladonna taken in small doses gave rise to a redish eruption, analogous to that of scarlatina, predicted that it would be a "prophylactic" to this disease. Mr. Bayle has collected a great number of facts in reference to this point from which the following are principally extracted.

In 1811 a fatal epidemic raged in the district of Helschunthack in the duchy of Berg; 8 persons died of it, 22 were ill. Seltmei administered Belladonna to 575 persons; 52 were preserved. The three who were attacked were a mother and her two children, who had only taken the medicine four times. Hufeland, M.D. orderly
gave perfect immunity to all the individuals to whom they administered this substance in several epidemics. Mme. Liebig at Danzig (Austria Bohemia) obtained the same success during 7 years in which he had frequent opportunities of having recourse to this treatment. Lempertz, physician at Posen, preserved his four children and 20 families amounting to about 80 individuals, 2 however were attacked. Lempertz prescribed the introduction of the epidemic into several villages by administering this medicine at the proper time. In the very fatal epidemic of 1817-18-19 Mendel, physician at Cusan, made use of two preparations of Belladonna. With one he inoculated all the subjects; with the other he obtained the following results: out of 195, 14 were attacked and 181 preserved. The eruption was only slight among those who contracted the disease. In Wurtzberg of Wurzburg in 3 epidemics preserved all the individuals who made use of the medicine although they were allowed to visit and keep company with the sick. To be more certain of his results, he made a still more conclusive experiment; he chose in each family submitted to the prophylactic treatment a child who had not taken the Belladonna; all the children thus excepted were attacked. In 1820 during the course
of a very fatal epidemic. Rehr physicians at Verona gave the specific to 47 individuals amongst these 11 escaped the contagion and 6 were attacked, but almost in an insensible manner. Twenty-three children, out of 84, were attacked with scarlatina in the Military Hospital at Turin, which physicians to the establishment, gave Belladonna to the 61 remaining; all were preserved with the exception of one; and meanwhile the epidemic continued furious in the environs of the city. Krembman gave 70 children of the Institution of Trier; the remedy 10 were attacked, 61 preserved. The whole number of persons who were submitted to the preservative action of Belladonna by the Physicians referred to by Boyle amounted to 2037 and of these 78 were attacked whilst 1959 escaped in the several epidemics. All authors, he says, however, are not partisans of Belladonna. Leckheim asserts that this remedy had no preservative power in the Epidemic of 1828 at Torgo. Lamenstic and Buffet have also pronounced against it. Their evidence however has not been supported by any facts. In Edinburgh the experiment has been tried by Mr. Benjamin Bell in George Watson's Hospital, but without marked success. This result Dr. Henderson says was brought about because he did not give the Belladonna prescribed by the inventor.
Hahnemann. We gave much too large doses. But even with these doses the result was in favour of the Belladonna; for in George Watson's Hospital where the Belladonna was used 38 per cent took Scabieae. In Donaldson's Hospital where the Belladonna was not used the frequency rises to 52. Dr. Patrick McHandy also tried it in Edinburgh in John Watson's Hospital and the following were his results:—After having had 23 cases of Scarlet Fever amongst 91 children, in 1849, he began the use of the Belladonna, and after that he had only 9 new cases among the 69 remaining children who had not yet had the fever when he began the use of the Belladonna; and these 9 hepatitis within 14 days after the first employment of the medicine.

With regard to the first class of prophylactics—Phytobacter—Colonel 23 I think we still want facts to prove the assertions that have been made concerning their prophylactic power. And this will be more apparent if we apply to them the same test that Dr. West applies to Belladonna. The stumping advocates of its use have put its virtues to the simple and obvious test of administering the remedy to half of a given number of persons placed in similar circumstances as wage, ketogenic exposure to contagious *Comparing the results thus obtained...*
This argument of Dr. Wels does not hold good with regard to Belladonna for the Experiments of Dr. Wunderburg (p. 20.) and those of Lentz (p. 21.) show the application of such a test and in favour of Belladonna. With regard to Belladonna I think the conclusion deducible from the facts above noticed are, that it has some power as a prophylactic if given at the proper time and in the proper quantity, given in short as Statumenm recommended and we may also conclude that when it does not prevent the disease, it very often causes it to assume a very mild form.

I. CURATIVE TREATMENT

First in SCARLATINA Simplex. If the fever is not very severe, little or nothing is required beyond attention to ventilation, diet, which should be light and sparing, and cooling drinks. Sponging the body affords great relief; sometimes induces sleep. An emetic is of great use in the outset of the disease be allaying the feverishness and determining to the stool. The bowels ought to be kept open by mild eruptive medicines. And it should always be remembered that, however mild the disease may be in the outset, it requires to be carefully watched and if the symptoms of the kidneys being implicated do show themselves - if the pulse becomes quicker and the heat of skin greater, the quantity, appearance, or character of the
Urine should be carefully examined. If it be blood, and the fever considerable, the disease may assume even in a few hours a severe form. The symptoms if not relieved by somnolence, ought to be combated by cupping over the back in the splenetic, and dry cupping in the trunk or in cases where the epidemic constitution of the disease contraindicates bleeding, and fulminating diaphoresis give internally.

*Scarlatina Anginosa.* This is much more generally a more serious form of the disease than the former, requires more decided and active measures in its management, and various remedies have been employed. Bloodletting has been tried, and the results of its employment have been drawn up in a tabular form by Mr. William from various epidemics from 1763 to 1834 and he says that the conclusions which inevitably follow is, that the chances of recovery are diminished by the practice of bleeding in the ratio of nearly 1 to 41 as compared with the results where bleeding has not been practiced. That is in reference to general blood-letting. Dr. Bouder and others, however, bear testimony to the advantage of topical blood letting by applying leeches or by cupping to the back of the back of the neck if the throat affection is severe.

Emetics. Dr. Withering was in the habit of giving emetics during the first stage of the disease.
Dr. Williams also employed them but did not find it necessary to employ them as often as Boott. Nothing to denote gave the lenticular in the commencement of the attack; when the tongue "cracked" when the irritable of the stomach; when the giants are much swollen; and after local depletion. The remedy generally used are Senna-cammon or Senna-cammon and aspirinum; followed by hot water to promote its action.

Purgatives - There is great diversity of opinion as regard to the use of this, as in the use of any other class of remedies, i.e., in Latinic Aspinovis. For example, T. Williams says they are as debilitating as bloodletting. They are indeed very seldom necessary; whereas T. Hamilton and Wickersham supposed no class of remedies to be more suited worthy or entitled to more confidence. As in many other things the true line of practice lies between the two extremes. It is not necessary to give the patient purgatives to such an extent as to weaken him, but it is necessary to keep the bowels freely open at the accumulation of feces is very apt to add to the irritability of the patient. It is not a matter of very great moment what medicines are employed for this purpose; Senna either alone or combined with cream of tartar; calvus or colchicine for adults; calomel alone, or combined with rhubarb; these will serve the purpose.
Cold affusion, has a very marked impression on the fever. It diminishes the pulse both in frequency and hardness. The dryness and heat of skin, induces moisture and even sweating. What is much wanted refreshing sleep, the justified physiologic agent, says Dr. Baldwin. But everything even bloodletting in acute inflammation, by which the functions of the animal economy are controlled with so much certainty, safety, promptitude as the use of cold water to the skin under the augmented heat of scarlatina. I have had the satisfaction in numerous cases of witnessing the immediate improvement of the symptoms and rapidity in the curelessness of the patient produced by washing the skin. Dr. Cudle mentions a case of scarlatina which was treated with success in this way. Yet although the cold affusion is spoken of in high terms by some there are many authors of high standing who object to its use; as, Dr. Watson, Dr. Copland &c. So that we still want accurate statistics to prove that the treatment is really superior to that generally adopted; and there is another question, I think, that requires answering. Is the patient rendered more liable to dysentery or any other of the sequels of scarlatina by the use of the cold affusion? One would fancy a poison that the liability to Affection of the skin...
it increased by the use of the cold affusion, as the first effect of the cold must lie to drive the blood from the surface of the body and thereby cause congestion of the internal organs. And as formerly stated, it is almost universally admitted that the sudden application of cold to the surface of the body is the cause of the kidney affection. It is a question I am quite incapable of answering since I cannot lay my hands on any statistics with regard to the use of cold water in Scrofula.

Dr. Burr recommended one or two pints of cold water to be poured over the patient, after which he was put to bed and hot drinks administered. If the cold continued, that is if the patient felt chilly and inclined to shiver, he gave more. If the pulse rose and the heat of skin returned, the process was repeated. The more modern method of applying the cold affusion is by the wet sheet packing. The details of which are so well known that I need not repeat them here. Although all are agreed as to the propriety of using the cold affusion, all I think are agreed as to the efficacy of driving the surface of the body with cold or tepid water.

Irrigation with ice is another method recommended with a view to reducing the heat and purging of skin. It was originally advocated by Dr. Laennec of St. Thomas of Hanover and is very highly esteemed of by Dr. West.

Diaphoretics have also been recommended;
but there is only this objection to their employment, namely, that they cannot be got to act. your
may give them but they have no effect.
Gargles - All sorts of gargles have been tried
to relieve the throat but none seem to be pro-
eliminary of so much relief as the inhalation of
the steam of water.
However slight the attack of scarlatina may
be, the patient should never be allowed to leave
his bed sooner than 10 days and his room
sooner than 3 weeks after the attack. While
the urine ought to be tested twice daily for
albumin in order that the first threatening
of any evil symptoms as dyspepsy may be at once
noted with the appropriate treatment. and
for some time afterwards the patient must
be extremely careful to avoid exposure to cold,
damp, errors of diet, &c.

Scarlatina Maligna

There has been not a little controversy among
as to the proper remedies for the most virulent
and fatal form of scarlet fever; and remedies
the most opposite have been recommended for
its cure. But if we believe it to be, as we do, of
the typhoid type of fever, it seems very evident
that the most suitable plan of treatment will
be such as is calculated to support the flagging
powers of the system until it shall have thrown
off the poison by which its powers are depressed.
Nursing general bloodletting is found to be not only useless, but hurtful in scarlatina. Maligne, as it still further exacerbates the already too much weakened powers. Local bloodletting, moreover, may prove of use by relieving local congestion while it does not weaken the patient to any considerable extent. Cupping or leeching over the loin is found very useful in relieving the congestion of the kidneys. And after leeches are applied to the angle of the face, they have the effect of relieving the sore and swollen throat. Stimulants, such as, Carbomalt of ammonia, wine, or quina, are to be used almost from the beginning of the attack, more especially if the pulse be frequent and luf. The towels are to be kept open, as the accumulation of fever aggravates the fever. Sponges as a warm solution of chloride of sodium ought to be used in order to clean the throat of adhering mucus. If there be much adhering lymph, hydrochloric acid (strong) mixed with honey in the proportion of one to the former four to six of the latter may be applied to the throat by means of a piece of lint or a cannula with buck. This may be applied two or three times in the course of the 24 hours, and its strength may be increased if the times are accelerated or tied to leeching. In the case of children who are too young to gargle, the solution may be injected by means of syringes.
In the Croup, which is often a troublesome disease, Mr. West recommended: A solution of the nitrate of silver of the strength of go 16 or 21 to the 37 of distilled water to be injected into the nose every four or six hours. Sometimes constantly applied over the swollen glands are of use in relieving the feverish and pain that are present when the disease is severe, and blisters applied over the glands are said to render the affection of the disease mild. Mr. Watson recommends a decoction for the patient a weak solution of chlorate of potash (3 1/8). Some authors of high standing speak favorably of the use of chlorate itself. It probably acts by depriving the arterial fluid of its oxygen qualities. The diet ought to be nutritious throughout.

Great care must be taken during convalescence. Let dyspepsy or inflammation leading to effusion into important organs ensue. If the fluids, purges, or diuretics ought to be used; and such purges, fluids, or medicines of a stimulating nature are obviously to be preferred owing to the congested state of the kidneys. If inflammation should occur it must be met by active treatment, bleeding, purging, and Mercurial.

(F. M. Castner, 1837.)