1856

James Lind

1. Scaly eruptions - more symptomatic
2. Eruption ends on 21st day (Reptile) 9.
3. Relation of mortality to weather 10
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On
Scarlatinal Dropsy -
Thesis -

by
James Landale
Dropsy after Scarlatina.

For various reasons have I been induced to choose as the subject of my Thesis: Dropsy subsequent upon Scarlatina. 1. From being enabled pretty frequently to study the disease practically at the Red Tide during the course of the last Session. 2. From the extent to which the malady has prevailed among all ranks of the community in this city in 1793. From the severity of the disease and the high rate of mortality it has occasioned. The mortality prevailing not only in the families of the lower ranks, in which the deaths might perhaps be attributed in some degree to the want of comforts and care in the absence of their families, but also in those of the higher ranks, in which the invalids have had the greatest possible attention.

It has been said—and said with much truth—that dropsies in general are rather symptoms of disease, than disease in themselves. And it has been affirmed that it would be more philosophical and scientific to treat of the original malady upon which the effusion or accumulation depends: to erase dropsies from the list of substantive disease and to place them in the catalogue of common symptoms.
This, however, we find practically impossible, for it is oftentimes uncertain, while yet the patient is alive, what or where the primary disease may be, and accordingly, the sole object of our treatment then is, the dyspepsy, the disease. Secondly, the confined fluid is in fact something more than a symptom of disease, it is often a cause of various other symptoms. By its pressure, important functions are embarrassed, and even life is extinguished; with its removal, the patient will be often restored to comparative comfort, or even to what is far as his sensations, and powers and belief are concerned, to himself, for the time a state of health. In considering scarlatinal dyspepsy, I will do as in its most extended sense, employing the term dyspepsy to signify the effusion of fluid into the pericardial and into the pleura cavities, or into both. Of all the secondary affections following after scarlatina, the Aracarea is the most material, being almost as fatal as the palsy itself. They appear to be in form that may not be followed by Aracaneous swellings. However, mild the constitutional affection, or slight the affection of the throat, however free from internal complication the complaint may be during its course, the faucial may cause threaten the veins, but chiefly as respects the viscera of the kidney and the Consecutive Dyspepsy. Indeed, when very slight
o mild attacks occur during the more severe or malignant prevalence of the malady, then these mild cases are the most apt to be followed by dyspepy, unless the treatment during convalescence be most judicious and even although the requisite care be taken. This may arise in some instances from the circumstance that such mild cases are less carefully watched, it is exposed to unfavorable influences at a period of the convalescence when the kidneys are peculiarly prone to become congested. In scarlatina rubra besides frequent internal complications, the kidneys are always more or less implicated although not so manifestly as during convalescence. The inflammatory action is however modified more or less from the healthy ethmic conditions characterizing ordinary inflammation, as respects both the state of the vascular system, and the morbid consequence or product of that action. The fluids in ordinary inflammation being not contaminated by an animal poison. According to the experience of Dr. Copeland that form of scarlatina without eruption is frequently complicated or followed by dangerous sequelae. The fever in this variety is most frequently of an asthenic kind, the complications are frequently found upon close examination at an early period. They are often more or less latent, or masked, until they have reached a formidable height, or they often escape observation until they are
 Seriously advanced, or are displayed by a post-mortem examination. It is the belief likewise that affections of the kidneys are not merely occasional sequelae, but are either accompaniments or early complications of some cases of this form of scarlatina. In scarlatina without eruption and without laryngitis, these are recorded rare instances of chorea, especially anasarca occurring in families or localities, when the fever prevailed. The children having never complained of previous laryngitis, although the two most characteristic symptoms of the fever are not developed, the infection nevertheless causes lesion of the kidneys with the sequelae of a most dangerous kind. It has been declared that the chorea consequent upon this latent form is more severe, complicated and fatal, than when it follows the more regular or usual forms of the disease. Why this should be so, is not known. It is usually noticed in patients cachectic or anemic. In the more severe forms of the disease the destruction of the brain is often such as fatally to increase the malignancy. If patients do recover, they very frequently experience a general and profuse perspiration, or copious discharges from the alimentary canal which diminish the convulsive affection.

There are two forms of anasarca or chorea occurring after scarlet fever, the one
Depending upon inflammation, the other, upon an anaemic condition of the system. And just as to inflammation. Inflammation is the renal disease most commonly associated with the cataract, and has been termed by Dr. Johnston, Desquamative Nephritis. There are two varieties, the Acute, and Subacute or Chronic. The first, may occur at an early or late period after the appearance of the exanthem, but generally at an early period. As the symptoms of both vary in degree only, being more intense in the Acute than in the Sub-Acute, they will be included in one description. The premonitory symptoms are tolerably well marked. They consist in a persistence of the febrile phenomena beyond their ordinary duration, or in their reappearance after having ceased at the ordinary period. The patient becomes capricious and dull, and his appetite is diminished. His face gradually acquires the peculiar blemish, phlegmatic appearance so characteristic of the disease. The eye having a dull heavy look about them. It is for me is also more scanty than natural, and he now wants to make water more frequently than usual, especially during the night. After some time, languor, a deep seated pain in the back and limbs, with head ache which is often intense is complained of. This pain in the loins is sometimes, but rarely, very
severe, and it occasionally extends downwards to the inside of the thighs, and to the testicles. The skin is hot and dry, the tongue parched, and there is now great thirst and loss of appetite. The pulse is quick, sometimes heard, and throbbing, and the sufferer becomes very restless. At an early period of the attack, there is likewise frequently nausea and vomiting. Besides the urine being found scanty, it may be altogether suppressed. Its specific gravity varies considerably in most cases deviating very little from the natural standard. In Chronic Necrouraemic Nephritis however, it is usually greater in quantity and of a less density than in health, varying from 1075 to 1015. The depth of color varies according to the admixture of blood, being reddish brown, or of a peculiar smoky tint. There is generally much albumen, with blood corpuscles and epithelial cells, or that has been called by Johnston epithelial casts, from their being found entire and recently formed. The urine is generally so albuminous, as to become almost solid when boiled, or on the addition of citric acid. Occasionally crystals of uric acid are met with, which however usually appear, after the extreme congestion of the kidney has been relieved, and when the secretion has again become more abundant. Nal very rarely appears either in the cells or in the casts,
During an attack in children, and in adults.

In the contrary, more or less oil may be seen on examination by the microscope, when the disease has continued beyond a period of two or three weeks.

If there is a diminished secretion of the urine, and consequent excretion of leucia, we may have another set of symptoms, arising from affection of the nervous centres. The patient has a great inclination to sleep, without however any actual stupor. Sometimes the only premonitory symptoms are languor, depression of spirits, and a gradually increasing pallor of the face. On the appearance of the droopy, the symptoms indicating implication of the nervous centres, are either alleviated, disappear altogether, or become decidedly aggravated. If this last is the case, we may have stupor, coma, convulsions, and death speedily ensuing, from the circulation most commonly of some points in the blood, or occasionally from the superinfection of inflammation.

The next variety, viz., Simple Droopy, is of far less importance than the preceding, being by no means so common, and the danger attending it, being comparatively slight. Being produced as a consequence of anemia, it was called by D. Behrent, Hydrodrops Anemicus. By D. Tribe, it has been called
Simple Drapay, from the non-occurrence of coma, convulsions, or other symptoms of Luecemia. Its duration is usually less than that of the albuminous form, and although fluid may collect in one or other of the larger cavities, this is very seldom met with inflammatory visceral disease. The symptoms attending it are very similar to, though of much less intensity than those characteristic of the other forms. The leucophlegmatic appearance assumed by the face is very indicative of the disease, and the serous membrane of the lips, gums, and conjunctiva become very pale. The patient is dull and incoherent, and complains of increased thirst and loss of appetite. The pulse is however only slightly quickened and is soft and weak. In a few days after the disappearance of the larger back effusion takes place, gradually involving the face, the extremities and the rest of the body. It however gradually disappears, the average duration of its continuance being about fourteen days, from the invasion of the Drapay.

The fluid exuded into the cellular tissue and cavities has been shown to vary considerably in its chemical composition. This variety depends not only on the seat of effusion, but also apparently on difference of constitution, or other individual peculiarity, as the fluid
differs in the corresponding cavities of different individu- 
als. An important fact noticed by Dr. Robert Will's 
in every case examined by him, of fatal issue follow- 
ing the latona, that the effused fluid contained 
a notable portion of urine. He tested fluid from the 
ventricles, pericardium, pleuræ, and peritoneum, in 
every case found urine. The effused fluid also 
frequently shifts its place of deposit, leaving one part 
to be effused into another; but most frequently tri- 
ades the eyelids first, and departing last from the 
feet or ankles; sometimes however it lingers longer 
in one of the cavities. The day of invasion varied con- 
siderably, occurring sometimes during the eruptive period 
of the primary disease, and in others not until after the 
slape of six weeks or more from its outset. Most 
authors consider the 20th, 21st, or 22nd from the commence- 
ment of the disease to be that on which the effusion 
usually first manifests itself, but an examination of 
the returns of the Registrar-General by Dr. Tripe, shews 
this opinion to be incorrect, for they point to the 14th 
day from the commencement of the febrile stage as that 
on which the disease most frequently occurs. The days on which the invasion most frequently happens, are 
the 21st, 22nd, and 23rd. The order of frequency being as they 
are here placed. As to the duration of the diphth—
Disease is looked upon as one of rather a chronic character than otherwise, unless it prove fatal in the first stage. The average duration of acute cases is twelve days. The mortality from the disease is much greater in males than in females. The former are much more liable than the latter, in the proportion of 1 to 5 - 4. The greatest number that die are under five years of age. The 1st year is the most fatal of all. Only 13 die in first year. 18 in the 2nd year. Variations of the atmosphere, exert very considerable influence, if not in the superincumbent, yet most certainly on the mortality of scarlatinal disease. An evident connexion between the temperature and comparative mortality has been noticed, but an accurate corresponding relation between the two, however, has not been observed. The proportion to the scarlatinae it may be said that the disease is less fatal during the quarter ending September, and most fatal in that ending December. And when compared with Italy it is least fatal in the quarters ending March and June respectively, and most fatal in that ending December. It has also been found, that the deaths in August are much smaller than for any other month in the year.

Pathological Anatomy of Kidney in Scarlatinal Disease. The changes undergone in the kidneys are those usually described as the first and 2nd stages of Bright's disease.
Both Kidneys are diseased, and commonly in an almost equal degree. In the incipient stage, the glands are found flabby, friable and unusually large, sometimes more than twice the natural size, being gorged to a greater or less extent with venous blood. Their weight also is increased, so that each kidney may weigh from five to eight ounces, and in some cases even more. Their external Surface is usually smooth and of a dark colour, and studded here and there with red spots and points of still darker colour like leucocytes, producing a somewhat irregular appearance. The capsule may be easily torn by the cutting into the organ a tawny fluid exudes and on examining the surfaces, the cortical substance will be found much thicker than usual, and the bright or dusky red spots mentioned above will be seen dotted all over. These leucinous spots to which Mr. Bowman first demonstrated are sometimes round, sometimes of an irregular form. There appears a very marked distinction between the cortical and medullary portions. The strike at first are coarser, and more widely separated from each other, from matter being deposited. If the tubular cones are in Inflammation he however drawn out the cortical portion may become less, but this condition is not yet decided. The bodies of the cones appear con-
pressed by the medullary portions of the cortical substance which pass between them, while the bases are expanded and spread out into the cortical portions. From chronic congestion the pyramidal portions like the cortical are also congested either entirely, or only partially in these parts. Most external. The lining membrane of the pelvis of the kidney is commonly vascular and red, and occasionally that of the ureter. In the disease advanced the glanules present the well-known characters of the 2nd stage of Bright's disease. Besides being enlarged and of a yellowish and mottled appearance externally, there is the moldy formation of a somewhat granular formation deposit which seems to be for the most part confined at first chiefly to the cortical structure of the kidney. Indeed, the tubular masses may present as distinct sign of disease, even although the cortical portion may be very far advanced in granulation, and the natural structure of the organ has gradually disappeared. On examining the renal tubules with the microscope their outline will be found obscure and irregular, and there cells more or less filled with detached epithelium, either loose or bound together forming the casts of Ammon, or as they are called by Johann epithelial casts. The epithelium normally lining the inner wall of the tubules, is frequently more or less deficient, and in many tubules
entirely wanting, In unfavorable cases, the tubules may remain permanently deprived of their epithelium, thus enabling them to perform their proper secreting function.

As respects the cellular tissues and the bronchial cavities, it need only be added, that the former, in generally more or less loaded with serum, the latter sometimes contains effused fluid, with or without, slight or marked inflammatory appearances, although these latter are not as frequent as in primary complications.

Diagnosis. The importance of ascertaining the existence of the complication of arsenic during the early stages of scarlatina is extremely great, that much as the issue will depend much upon the treatment adopted for it. In many cases which terminate fatally at an early period of the disease, the issue is in a great measure owing to the early implication of the kidneys having been overlooked. In some instances the complication of the patient is alone sufficient to warn me of the approach of arsenic. When the typhoeal ceseore is present, the appearances are always deserving of attention, for it only assists the physician in forming his diagnosis, but also furnishes indication of the state of vital power. In the change of state of this fever, the eruption assumes a deep,
Dark, or livid appearance, or an almost evident tincture, is the depression of vital power, and to the change in the blood, thus exhibiting an hemorrhagic tendency. The fibrin rapidly losing its power of vital cohesion. In many, the symptoms which precede the Anasarca are so slight as to escape observation, until oedema or fullness of the face, or other indications of advance evince the nature of the affection. After the end of the fourteenth day, he can judge of recovery of the patient to be gaining strength. If after the subsidence of the febrile symptoms, during or after recuperation, there is a recurrence of the sharp and quick pulse of scarlatina and if this be also present pain in back and limbs, stifness, with languor and heat of skin, then should the urine and region of the kidney be carefully examined. One of the most certain forerunners, as it is always the most invariable accompaniment of death, is the excessive reduction of the quantity of urine. In further examination it is usually found to contain a large amount of albumen, but on this alone, in certain dispositions can be founded, as there are several medicinal agents, and other ingesta, which, in certain conditions of the system, or when taken for some time, will induce albuminous urine. In dropxia, or inflammation following scarlatina, the urine generally becomes al-
blennorrhous with or previously to, the jetride symptoms adhering in the affection. It is often most remarkable in these cases of dyspepsy or inflammation which are consequent upon the non-cutaneous forms of the disease. In more rare cases, the urine is bloody or a pale red colour, and there is always a frequent desire to pass it. Under the microscope, fibrous casts of the renal tubules are recognised, and there is always much epithelium. Like the albumen however, this latter is no certain guide as the long continued exhibition of diuretics will lead to its presence in the urine. To arrive at a correct opinion in regard to the pathological importance of the change undergone in the kidney during the articular disease, it is necessary to bear in mind both the symptoms presented by the patient and the hints afforded by the character of the altered urine. If it is diminished in quantity, if there is present epithelial scales, blood corpuscles and albumen, we may be quite certain as to what has taken place. When there is no premonitory fever, anasarca may however occur. In that form of scarlatina described as latent, rare instances of dyspepsy have been recorded both by St. George and Copland. It may be pretty certain that the patient has suffered from the poison although it has not manifested itself. If there is a pre
Prognosis. The arsypa in connection
with scarlet fever, varies much in danger, with the team
and the prevailing epidemic, with the heat of exposure,
with the nature of other associated morbid states, and
more especially with the state of the kidney, urinary
secretion. If there be no visceral disease, the state of
the urine affords the most definite information. In
proportion as it deviates from the normal standard,
in like proportion is the case a dangerous one. In
learning the urine, if we find its quantity, specific
gravity, and the amount of its saline constituents to
increase daily, the albumen, fibrinous casts, and blood
corpses to diminish, and its dark colour change to
its normal pale yellow, our prognosis should be favorable.
If on the other hand, these grim symptoms instead of be-
coming natural go on increasing, we may be sure that
our patient is getting worse. When the case is favorable,
one of the earliest signs of amendment is an increase in
the quantity of the urine. It is by no means unusual for
an adult ‘‘days 5-7’’ return during convalescence from
an attack of acute nephritis, to pass from four to six
pints of urine in twenty-four hours. On the other hand,
the disease is taking an unfavorable course, when the
acute inflammatory form degenerates into the chronic.
The urine becoming of a less specific gravity, of a pale greenish tint, and containing far less silice and organic compounds than in health. If the urine be very scanty, very deep colored, or suppressed, and effusion takes place in any thin cavity during the inflammatory stage, danger is indicated. The greater the activity, the worse the organism. The less is the danger of effusions, for it shows that the blood has as yet undergone no considerable deterioration. As long as the urine, besides its albuminous contents, exhibits traces of blood extravasation, separated epithelium, and an acid reaction, the danger is less than if it were clear, phosphatic, and highly albuminous. Because those last indicate a very considerable deterioration. Nausea occurring alone during acclimatization or convalescence, although the urine is albuminous is generally cured, if no further complication takes place, and if the urine is not very scanty, or very albuminous, or bloody.

Causes. As a predisposing cause, the scarlet fever poison is considered by some authors as the essential cause of erysipelas, and by others as exercising but little direct influence upon its production. By the former, it is considered to act on the kidneys in the same way as on the skin, but by the latter, this action is
Denied. In whatever way however, it may act it is certain that abortion follows an attack of Scarlet Fever more frequently than of any other Febrile Disease. In examination of the history of Scarletina it is seen that during some epidemics, the number of patients that suffer from subsequent abortion are very various, for in 1848 and 1852 when Scarlet Fever was unusually severe, the percentage of fatal cases varied greatly, according as predisposing causes we must have certain atmospheric peculiarities, which attack certain organs with much greater violence than others. Among the exciting causes we will first consider Cold, since it is one of the most fruitful sources of this chief. It is a well known fact that the Scarletina, the cutaneous vessels take on an excited action, to repair the loss of the cuticle, which is usually thrown off after the Febrile symptoms have subsided. With this increased vascular action however, which is consequently observed going on during the Acquamation period, there is a weakened state of the general system on account of the previous illness, and the vessels not having recovered their usual tone, the surface of the body accordingly is for more
Sensible to exposure to cold, and more easily chilled than it otherwise would be during a normal state of health. It is accordingly possible that under these circumstances all the constituents of the cutaneous secretion are diminished, and as a consequence of which they must either accumulate in the blood, or they must be eliminated by some other channel. The kidneys are therefore the first organs generally to suffer, from their actions being vicarious with that of the skin. That the proper cutaneous secretion must be diminished by cold is sufficiently evident from the palor and shriveling of the skin, which results from the diminished supply of blood produced by chilling of the surface. That the constituents of the secretion must for a time at least, and in a greater or less degree also accumulate in the blood will be apparent from the blood being made the channel by which the materials are conveyed to the organ called upon to assume the vicarious action from the great action thus excited in the kidney, in its weakened state, its action likewise becomes disordered, and disease in the result. Or the disease may be caused by the cold hindering or suspending the proper functions of
The skin, and by the already congested kidneys. Being then called upon to eliminate the materials ordinarily secreted by the skin. Next to the opposite plan of early exposure to cold, an excess of warmth is most likely to excite disease of the kidneys in the course of scarlatina, for while keeping the bed is the best prophylactic against an attack of chorea after scarlatina, yet the greatest solicitude of the friends, by keeping the patient confined and thus shut up in a close, hot, and ill-ventilated apartment, may induce that which the treatment was intended to prevent. This is a very frequent cause of the disease amongst the poor, who live in small, dirty, and smoky rooms. The prejudicial effect of impure air is seen on a large scale, by comparing the inhabitants of great towns, in respect of health and longevity, with those who live in the country, the mortality being much greater especially in early life, among those of large and crowed cities as compared with the rural population of the same climate. It is as a predisposing cause that the impurity operates, for, if it does not generate, yet it most certainly aggravates the symptoms, and augments the mortality. The air.—Under administration of stimulants during Con-
Vaccination, or at any other period, when not required by the state of the system, will without doubt in all cases an attack of anthrax. They appear to have a direct tendency to locate disease in the kidneys, for they often increase the jaundice disturbance, and diminish nearly all the secretions, particularly that of the skin, which frequently becomes hotter and drier during their illness, thus checking the natural process of elimination by the skin, while at the same time they tend to direct the poison to the kidneys, they locate disease. In cases, however, in which the skin is without unusual heat, and the pulse weak and small, the Cautions must be taken to. Instead of diminishing will more frequently stimulate the skin to resume its functions: by maintaining the balance of a well arranged circulation. The early administration of indigestible food will also locate disease of the kidneys by admitting into the blood imperfectly digested materials, and thus adding to the work of the secretory glands. Variations of the atmospheric heat very considerable influence, if not on the supernutrition, yet most certainly on the mortality of scarlatinal anthrax, and indeed here as in all diseases, it has long been a popular, as well as a professional axiom, that sudden vicissitudes of temperature
Precautions

Treatment. The treatment of Scarlet Fever will divide into the prophylactic and curative. 1. Prophylactic. The most important matter to be attended to after an attack is to encourage the proper action of the skin. This object is best affected by putting the patient into a warm bath, in which a quantity of common washing soda or Carbonate of Potash is dissolved. The bath may be given daily, and before using it, the patient's body may be well rubbed over with oil, or with yellow soap. Great attention should also be paid to the diet and the necessity for doing so impressed upon the parents. It should be bland, nutritious, and easily digested, composed chiefly of carminative food, so that as little as possible of the irritating materials to the kidneys should accumulate in the blood, adding to the work of elimination from which they are already suffering. Alcoholic drinks are to be strictly avoided.

If tonics are required, chalybeates are given.

In addition to these precautions, we must take care that our patient be not exposed to cold, or else the cure will be lost. Rest in the horizontal posture should be enforced, since it tends to quiet the
Equalize the circulation, uniformity of temperature, favoring the action of the skin, and preventing the risk of a check to the perspiration.

Curative - If notwithstanding all these precautions, or owing to the neglect of them, the state of the urine be indicative, congestion or obstruction of the kidneys, one treatment should be directed chiefly to these organs. If the symptoms indicate the disease to be of an acute character, our first step will consist in the abstraction of blood from the body by cupping or leeching. The amount, varying according to age and strength of patient, our object being to relieve congestion and to prevent occurrence of further injury. Our next indication is to restore the function of the skin. One of the first remedies for effecting this is the wet sheet. It is not necessary however, that it should be cold. A blanket or flannel dipped in warm water is best, and the more especially if the circulation is languid. It has a soothing effect, and the patient, most frequently a child, is not alarmed and the desired effect is obtained. In addition to these measures, warm clothing should be adopted, and especially flannel next the skin. If cold water be used,
care should be taken that faintness do not happen.

Dr. Todd in the Medical Gazette for February, 1849, states that he knows no more valuable remedy than the warm bath. "Indeed," he adds, "I should pronounce it the most valuable single remedy for this disease. It must be used frequently. Bearing in mind that with the disease and the remedy have a depressing tendency, the patient can bear it once a day for a few days; sometimes it may be given twice a day, but never it to as large a quantity even on its daily dose. In case there be an access of dyspepsia apprehended, the daily dose of the warm bath during the period when respiration is, or ought to be, taking place, often succeeds in arresting it. The patient should be confined to bed or to the room of moderate uniform temperature. The benefit derives being shown in the administration of the bath, and in increased secretion of gas highly abominable and bloody bile saline emetics must be carefully avoided. The administration of antimonials have been found very valuable in promoting the action of the skin. The antimonials wine may be given to an adult in dose of from 1/30, at 3/30, and repeated every four or five hours. The emetic may be advantageously combined
with Davis's Powder, if there is much restlessness, and when the bowels are freely open, the urine is not very scanty, and when there is no headache or restlessness (drowsiness). In other cases, opium in any form is dangerous on account of its tendency to check secretion and aggravate cerebral symptoms. He must also take care that the bowels are kept freely open, in order that foreign matters may be eliminated. If any symptoms of cerebral abscess, or of the serious inflammation arise, the patient must be very freely purged, with the hope that by this means the poisonous cause of the inflammation will be removed. A very useful purgative is the compound saltpeter powder, which may be given daily in full dose. Great care is necessary on the administration of mercury, since patients are very speedily salivated by small doses. In very small doses it may be given with colostrum with a view of promoting the action of the liver, and increasing the intestinal secretion. To produce a tonic or controlling effect on the dilated renal vessels, astrigents are found of service. Dr. Trepa found the leaves of the currant of iron most effective, exhibited in full doses, in combination with a few minims of the Tincture of Digitalis.
...to by itself. Some writers have recommended Gallic
acid; others, with French prepared the Laminaria in
an advanced stage of the disease. Much benefit has also
been derived from the use of alun, with or with-
out sultes. For removing the hydrophic effusion,
purgatives are the most powerful agents, and especially
hypogastrics. The most useful perhaps being Batatium.
The Compound Salap forte, as already pointed out,
has also been found most effectual. As to diuretics.
In the use of diuretics, we must be chiefly guided
not by the amount of the hydrophic effusion, but
by the state of the kidneys, for if these glands are
the seat of much congestion, whether active or passive.
Diuretics are to be used in proportion, by affording
increased stimulation to an already overstimulated
organ. Digitalis although extensively employed in
the kinds of atrophy has been found to be
most serviceable in those forms associated with
an enfeebled state of the constitution, seldom
succeeding in inflammatory atrophy, until re-
action is induced by antiphlogistic means.
In that stage of the central atrophy, where,
Together with weakness, there is still left an
excited and irritable state of the arterial
system, it has been strongly recommended...
Indeed Dr. Farwell in the *Cyclopedia of Practical Medicine* considers it almost a specific, for generally he observes, with the disappearance of the excretability of the urine, on the administration of this powerful remedy: effusion at the same time disappeared. Dr. Holland strongly advises digitalis, but in combination with F. Ferri Carbonis. He considered it would be difficult to find any single combination more effectual in these cases, for the action of the Frenglo as a diuretic, is not only quickened and sustained when conjoin'd with the iron, but is in some way or the other guarded against some of its peculiar effects. In combination also with Pelargon and Squills to experience have proved it to be a powerful and efficacious remedy, but again, only in persons labouring under great debility and general debility. The preparations of Jastach in combination with Squills, Grikas, Anthras, or iron have been found very useful, when the urinary case is contained blood, and the quantity of epithelial cast and scale less. Dr. Grimes (Clin. Lect. Vol. I. pp. 332, 452 &c.) states that he can speak with the greatest confidence of the efficacy of Potassium Barys, recommends the flowers (in the form of infusion) of the Sparrum Scoparia, Great Banton and
Care is necessary in the administration of blisters, especially in children. A frightful blanching sometimes follows their use.