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Medical College of Georgia.

"Je prends le bien où je le trouve."

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ARTICLE III.


The appellation of "Elephantiasis," was anciently given to two distinct diseases of very dissimilar characters—the one an enlargement of some portion of the body, the other a scaly, glossy, and tuberculated disease of the skin; the former most frequently attacked the extremities, whilst the latter usually occupied the face and ears, and sometimes other portions of the cutaneous surface. These terms have been retained; and for the purpose of preventing confusion, modern writers have formed of them two divisions: the first, distinguished by the epithet "Elephantiasis Arabium," or Arabic division—the latter, "Elephantiasis Graccorum," or the Grecian variety. The remarks in the present essay will be founded on the distinctive subject of Elephantiasis Arabica.

History.—The observations of some of the oldest writers on Medicine go to establish the truth of its being a disease of great antiquity. The earliest account that we have of it was by Rhazes, a celebrated Arabian physician, who, as early as A. D. 850, accurately described it. Since this period, many writers have given extended descriptions of the disorder: amongst
them may be mentioned Morgagni, Chopart, Cheselden, Walther, Dionis, and Larrey; yet, more recently, the subject has engaged the attention and elicited the thorough investigation of Tilley, Dalton, Adams and Scott. The disease has received almost as many names as there have been writers engaged in the description, frequently assuming in part the name of the particular country, or place, in which it may be prevalent. Dr. Good has called it “Bucnemia Tropica,” from the fact that it most generally occurs in tropical latitudes. In the Polynesian islands it has been termed “Yava Skin,” from the supposition that it originates from the use of a favorite beverage of those islanders, called “yava.” On the peninsula of India, it is known as “Cochin leg.” In Malabar, it has been called “Anay Kaal,” which name it takes from its supposed resemblance to the elephants’ leg. In Barbadoes, it is sometimes called “Barbadoes leg,” in others, the “glandular disease of Barbadoes.” By some authors it has been termed “Yam leg,” from its resemblance to that vegetable. On the island of Ceylon, it is called “Galle leg,” from its being most common in the vicinity of the principal town of that name. In France, it is known as “Lepra Elephantiasis,” from the resemblance to the elephant’s leg. The Arabian physicians applied to it the name of “dal til,” which also means elephant’s leg.

It may, to the casual observer, appear a remarkable coincidence, that so many different authors, located in different parts of the globe, and all speaking different languages, should have, with such unanimity, compared this disease to one and the same object; but it is only necessary for him to behold one solitary case, to forcibly impress his mind with the correctness of the simile. The enormous size of the part, with its clumsy, unsightly and misshapen appearance, are not the only points of resemblance to the leg of an elephant; for at the same time the rugose and scaly appearance, together with the rough and uneven surface, bear close analogy to the skin of that animal. It is neither a contagious nor infectious disease, but, like many others, occurs endemically, exhibiting a strong predilection for particular localities in Southern latitudes.

The countries in which this disease is in the most remarkable degree endemic, are the islands of Ceylon and Barbadoes,
Egypt, Abyssinia, Japan, all of the West India islands, and some portions of South America and of Spain, the coast of Malabar, and also in many of the South-sea islands. Sporadic cases occasionally occur both in Europe and the United States. As has been previously remarked, it is chiefly confined to warm latitudes, prevailing most extensively in those particular low, humid, and unhealthy situations, where malaria in abundant quantities may be reasonably supposed to exist.

**Liability of persons to the disease.** On the island of Ceylon it is wholly confined to the native inhabitants, including Creoles and half-breeds. Foreigners, from whatever quarter of the globe, are entirely exempt. In Barbadoes, it was confined to the black population alone, till about the year 1704, when the first white inhabitant became its subject: since this period, it has become very frequent even among the white inhabitants. In Ceylon foreigners are not subject to it, until after having become thoroughly acclimated by a long residence on the island. In some other countries it is said to attack more frequently the lower classes.

The young have also been represented as being more liable to it than those in advanced life. There are none, however, free from its dangers. It attacks all ages, both sexes, and individuals in every condition in life: the opulent, surrounded by every comfort, and enjoying a life of luxury and ease, are equally obnoxious to its influences, with the hardy and industrious peasant, who endures every privation in food and raiment, and in his daily toil is exposed to all the inclemencies of weather, and the greatest vicissitudes of temperature. There is no immunity from its attacks.

**Symptomatology.**—The onset of the attack is ushered in by the symptoms common to inflammatory or febrile diseases, such as rigors, with nausea, and sometimes vomiting, headache, and pain in the dorsal and lumbar regions,—these are succeeded by considerable febrile excitement, with great thirst, and intense heat of surface, followed by profuse perspiration. In the mean time, the part destined to become the final seat of the disease becomes tumefied, with increased heat and great pain, particularly along the course of the lymphatics; the skin pre-
resents a tense, smooth, and shining appearance, frequently of a bright scarlet color, and in many respects resembles erysipelas-like inflammation. Subsequently, and in the early stage of the disease, it may possibly be mistaken for phlegmasia dolens, to which it bears a close resemblance, but by careful observation and minute investigation, the distinguishing marks betwixt the two diseases will be sufficiently obvious to the skilful in diagnosis.

The attack usually lasts for several days, (from three to five,) and generally yields to a mild course of antiphlogistic treatment, and indeed frequently without any treatment at all, for there appears to be a great proclivity to a spontaneous subsidence of all symptoms of the disease for the time present. The febrile symptoms gradually decline, and finally disappear; the local symptoms also subside, and frequently with desquamation of the cuticle of the affected part, the patient being nearly restored to his ordinary health. The limb, or part affected, does not, however, return to the normal size, but remains somewhat enlarged. To an individual unacquainted with the nature and progress of the disease, it might reasonably be supposed that here the case would terminate; nor could his mind be brought to anticipate the horrible picture it may present, or the loathsomeness it may attain. Attacks similar to the first, follow each other at earlier or later periods, the length of intermission between the attacks varying in different cases. It has been observed by a distinguished English author, that a return of the paroxysm is generally preceded by a feeling of weariness along the course of the absorbents, with a benumbed sensation, as if the limb was asleep. Then follows the ordinary symptoms attendant on a paroxysm: accelerated pulse, with general febrile symptoms; furred tongue, with a renewal of the swollen and painful condition of the limb or affected part. Similar attacks continue to succeed each other, observing rather marked periodicity, each one leaving the part more swollen than the preceding, till it attains an enormous size. Thus the malady may gradually progress for months and years. After several attacks have been passed through, an habitual swelling remains about the ankle, dorsum of the foot, and toes, which is increased by exercise in either walking or standing. At first the swelling is
soft, producing a doughy sensation to the touch, becoming gradually harder, till firm pressure produces only slight pitting; the lymphatic glands in the neighborhood of the parts become enlarged and indurated, especially those in the groin, if the lower extremity be the part affected. In process of time, the regular paroxysms of fever become less distinct, and finally subside altogether; the glandular swellings are diminished, and there is much less pain along the course of the absorbents. It is very rare that these swellings advance to suppuration. The swelling up to this period has advanced slowly and regularly, commencing at the toes, (if the disease be located in the lower extremity,) and extending regularly up the foot and leg, but it does not preserve uniformity, in consequence of the constriction about the ankle-joint; the skin is formed into loose folds, which produce ridges more or less elevated, with intervening fissures, while the cuticle, becoming more rough and harder, interferes very much with the capillary circulation. In the most aggravated cases, these folds of skin assume a fungous, tuberculated, rugose or warty appearance. These warts or projections are occasionally of such length and size, as to add very much to the deformity of the part, and have not been inaptly compared to a cock's spur. Appearances of this kind do not however attend every grave case, for in some instances the tumefaction arrives at a very great extent, with but little change in the appearance of the skin, the principal alteration the part has undergone being in the sub-cutaneous structures, which seems to the touch rough, uneven and knotty; the shape of the part becomes very much changed; the foot acquires an enormous dimension and a square form in shape, the swelling overlapping and wholly hiding the toes from sight; the shape of both the ankle and knee joints become very much altered, and in truth the whole extremity, from the tip of the toes, to above the knee, becomes one huge mass of shapeless flesh. From the great distension of the skin it cracks in many places, through which exudes a thin, serous fluid, discharged abundantly, of a very disagreeable odour, and so peculiar and remarkable that when once observed, will ever afterwards serve to distinguish the disease, even in the absence of other diagnostic symptoms. The languid condition of the capillary circulation, in addition to the
cracking of the skin, soon develops ulcers of a very unhealthy, indolent appearance, with elevated, hardened edges, and small, pale granulations, which never cease to discharge a fluid of such offensive odour as to be almost insupportable. After the appearance of ulceration, there is marked amelioration of the symptoms; the attacks of pyrexia, which before have regularly recurred, no longer make their appearance; the tumefaction, previously on the increase, either remains stationary, or sensibly diminishes; pain, which has been a source of great annoyance to the patient throughout the whole course of the disease, is now materially modified, although not entirely absent—its character is changed, from that constantly attendant on an increase of swelling, to the pain peculiar to this particular form of ulceration. When, in the progress of the case, the extent of ulcerated surface becomes greatly augmented, either by multiplying their number, or enlarging the extent of boundary to those already existing, alarming constitutional disturbance is manifested. As a matter of course, an increase of ulceration is attended by a corresponding increase in the quantity of ulcerous discharges; to this succeeds general debility, with anorexia, mental imbecility, sleeplessness, pallid and anxious countenance, emaciation, and general wasting of the tissues of the body. Nature, accustomed to struggle against the ravages of the disease, overpowered and exhausted by the combined assaults, is no longer able to successfully contend with its adversary, but calmly yields the victory, and the revolting scene is closed in death.

The parts most liable to elephantiasis are those most pendulous, and in the neighborhood of a good supply of lymphatics and surrounded by considerable quantities of adipose and cellular tissues. The inferior extremity is the most common seat of the disease, and in that member it produces more frightful deformity than in any other location: it frequently attains a size equal to that of a man’s body, or larger. The next most common position is the scrotum, and but for the testimony, upon the highest authority, it would be incredible to narrate the immense magnitude that it has been known to reach. Mr. Liston reports a case in which he removed the scrotum, which weighed fifty-five pounds: it extended to the patient’s knees. There is another
report of the removal of the scrotum, which reached to the feet of the patient, and was in weight ninety-two pounds, and filled a pork barrel. The most extraordinary case of which we have any account, is that mentioned by Dr. Titley. The tumour rested upon the ground when the patient was in the erect position, and after removal from the body, was ascertained to be of the astonishing weight of one hundred and sixty-five pounds! Many of the patients that have been operated upon have recovered. It is seldom that more than one portion of the body is affected at a time in the same individual. There have been a few exceptions to this rule. Dr. Scott* mentions the case of a schoolmaster, at Point de Galle, in Ceylon, who had both arms and both legs affected at the same time. The same author reports another case of a woman, at the same place, that had the disease in both legs at once. These are very rare cases, and constitute the exceptions to the general rule. In females, the vulva and mammary glands are occasionally the seats of the disease; the clitoris has been removed for this cause. Next in frequency the arms become affected; then follows the scalp, neck, ears, tongue, and penis. Some of the internal organs have also been known thus diseased, as the ovaria, uterus, and liver. In fine, every part of the body appears to be more or less liable to this malady.

Ætiology.—In treating of this division of our subject, it were better perhaps to adhere to custom, in sub-dividing the causes into predisposing and exciting, although it will readily be discovered that we have at our command no facts sufficient to give a satisfactory explanation for either. After a careful perusal of the most elaborate articles upon this subject, by some of the eminent authors previously mentioned, we feel constrained to say, that their remarks upon this particular division, so far from being satisfactory and conclusive, amount to nothing more than mere hypothesis and vague speculation. Some of their theories are, however, not only ingenious, but also have the appearance of probability, as they are supported by corroborative circumstantial testimony.

In Demarara it is said to occur principally among the Creoles

*Encyclopædia Practical Medicine, p. 771.
(whether whites or Africans) and half-castes, while it rarely, if ever, attacks the aboriginal inhabitants, or Europeans. It is in this location, confined principally to the sea-coast. From these facts alone, it would appear that the amalgamation of the races predisposes to the disease. But in Ceylon, just the reverse is true, in two essential particulars, to that which obtains in Demerara. First, it scarcely, and perhaps never occurs except among the aborigines; secondly, it prevails most extensively at a distance of eighty miles from the sea-coast, where it is said that at least one-third, and probably one-half of the population, are affected with it. In every other respect, that portion of the island appears as healthy as any other, being remarkably free from intermittent or remittent fevers. It is in this part of the island only, that the disease is endemic, and persons who for a considerable length of time have been subject to its periodical attacks, upon removal to some other portion of the country, escape them, and not unfrequently perfectly recover. These facts tend to controvert the opinion, that an admixture of the races forms a predisposing cause to elephantiasis. But again, the present history of the disease in Barbadoes contributes in no small degree to confirm the correctness of the supposition, that it does amount to a predisposition of no mean importance. It has been previously observed, that on that island it was unknown, except among the blacks, till the year 1704, and it will be remembered that, prior to that period, the country was but sparsely settled by Europeans, and they of but recent residence. At that time, there were but few or no Creoles. Subsequent to that time, the number of whites largely increased, and at the present day, the whites and Creoles form a considerable portion of the population. During the past few years, elephantiasis has there been of much greater frequency, and confined principally to the Creole and white inhabitants. No satisfactory explanation can be given of their greater liability, as there appears to have been no change in the climate, and in no other respect have diseases multiplied. The history of the disease, wherever it has prevailed most extensively, shows that Creoles and half-breeds, in proportion to number, have been the greatest sufferers.

Among other predisposing causes may be enumerated
peculiarity of habit. General constitutional derangement and debility, also favors an attack; food of improper qualities, or deficient in quantity; an impoverished state of the blood, with languid circulation; the lymphatic temperament; absent or deficient transpiration—all predispose to this affection. But if all the causes mentioned as prolific sources of this disease, there yet remains one, that has barely ever received even a passing notice by any author upon the subject, and one in our humble judgment of paramount importance to every other. We allude especially to atmospheric causes and climatic influences, or in other and less doubtful terms, to malaria.

Were there no other arguments to offer in favor of this opinion than the analogy elephantiasis bears, from the very first primary symptom of the disease, throughout its whole subsequent course, to our common forms of malarial fevers, it would be sufficient to establish the greater or less identity of the two diseases. The very first premonitory symptoms of elephantiasis, are those most common to our remittent and intermittent fevers, as regular exacerbations, attended with rigors, headache, nausea, and vomiting, accompanied by pain in the back and loins, and these symptoms being succeeded by a distinct intermission. As before remarked, the paroxysms recur with considerable periodicity, the only dissimilarity between this and a case of common intermittent fever, consisting in the different length of the period of intermission. Now we would not be understood to say that the exacerbations return with the same exactness as the chill in common intermittent fever. So far as we are at present informed, no writer upon the subject has given sufficient attention to determine the exact periods, as it not unfrequently occurs that the intermission embraces several weeks, and even months. We venture the prediction, that when this point shall have received the proper attention, it will be discovered that the paroxysms of the disease recur with much more regularity, than has generally been supposed. It may be said, however, that "out of the words of our own mouth shall we be condemned," in reference to our previous statement, that in Ceylon and Barbadoes intermittent and remittent fevers are almost entirely unknown. But in answer to this argument, we would suggest how readily it may be conceived,
not only possible, but probable, that the same morbific cause, acting upon constitutions of peculiar susceptibilities, may and does modify and change the character or type of the common disease. Indeed, we know that this is true in regard to our malarial fevers in this country. Every practitioner has observed cases of entirely different types of fever, occurring not only in the same neighborhood, but even in the same family; the members of which had alike been exposed to the same influences. If this be a true statement in respect to the malarious diseases of this climate, certainly the same principles will hold good in Ceylon and Barbadoes. Although the common intermittent and remittent forms of fever may be unknown there, yet it may be that the inhabitants of those isles are scourged by the form of elephantiasis in lieu thereof.

An additional argument in favor of the malarious origin of elephantiasis is, that our types of fever have been productive of a somewhat similar affection, by instituting inflammation, in the lymphatics, more particularly, of the inferior extremity. The writer has now in vivid recollection several cases of marked phlegmasia dolens occurring in both sexes, and diversified ages, as an attendant of Typhoid fever. The cases, although not entirely analogous, are yet of sufficient similarity to throw some weight of evidence in favor of our supposition. A worthy member of the medical profession, in the West Indies, observes, that during attacks of fever there, there is a manifest predisposition to inflammation of the lymphatics, and a red line is frequently seen throughout the whole length of the lower extremity marking the course of the lymphatic vessels. In conclusion, upon this part of the subject, we need only advert to the fact, that elephantiasis is most prevalent in warm latitudes, in the vicinity of low, marshy tracts of country, bordering on rivers and lakes, where malaria exists. In British Guiana, we have it upon the testimony of Dr. Dalton, that the disease not only resembles in many of its phases, but is also frequently associated with intermittent fever.

The same obscurity veils a knowledge of the exciting, as of the predisposing or remote causes. By high authority it has been urged, that it is the result of vicissitudes of temperature; but that opinion has been controverted by showing that in
localities where it is most prevalent the temperature is remarkably uniform, the change not exceeding ten or twelve degrees during a whole annual period. It has been regarded by some authorities, entitled to confidence, as originally a local disease, produced by some local irritation, and the attendant febrile symptoms only the natural results of the local inflammation. This opinion cannot be sustained either by arguments or facts, and must, therefore, be untrue. If malaria be a predisposing cause, it also at the same time becomes one of the most important exciting causes. The remarks upon that subject previously made under the head of predisposing causes, would apply here, but need no repetition.

As previously intimated, we evidently regard this as a constitutional disease, and one that evinces a decided disposition to localize itself early in its course, and exhibits an obvious tendency to seize upon the lymphatic system. Upon post-mortem examinations of subjects who have died of this disease, the sub-cutaneous, cellular and adipose tissues, together with the muscular aponeurosis of the affected parts, are found hard, dense and tumefied. These changes appear as the result of the effusion of a quantity of sero-albuminous fluid into these several tissues, and which the absorbents are unable to remove. The effusion in this case differs from ordinary dropsical effusions, in this, that it is always coagulated, and if left to the unaided powers of nature, is never absorbed. It appears to be a fluid sui generis in another particular, in that it never excites active inflammation or suppuration. The muscles are considerably atrophied and of a pale hue, and surrounded by much fatty matter and cellular tissue. The larger veins are increased, while the smaller are diminished in size, and many of them entirely obliterated. The arteries are not materially changed in size, and are not very much enlarged, as from the hypertrophied state of the parts they supply might be supposed. The nerves are a little flattened by the compression they have sustained. In cases of long standing, the disease is not alone confined to the soft tissues, but the bones also become diseased. The general contour of the part, in the most aggravated cases, is frightful to behold, not only from its huge dimensions, but from the unnatural appearance produced by the firm agglutina-
tion of all the parts; the skin being deprived of all mobility and covered with scales.

From the earliest notice of the disease, down to the present time, it has been generally considered as one of the opprobria medicorum, baffling the skill of the most scientific, and wearying the patience of the most earnest enquirers, who have sought to investigate its nature.

As in the history of all other diseases, much light has been thrown upon the subject by a gradual accumulation of facts, so that it is now not only no longer a mooted question, as to the possibility of ameliorating the condition of the patient, and even affecting a permanent cure.

The treatment resolves itself into two divisions—the constitutional and local. The former comprises all those means that have for their object the prevention of the successive returns of the febrile paroxysms. The latter includes those remedies calculated to diminish the hypertrophied part, by facilitating the absorption of the effused fluid, or, in other words, to the abortive and curative treatment.

The first indication, which is to prevent the return of the paroxysm, will be very much favored by a removal of the patient from the locality where the disease has been contracted, and this should be the more imperative if it be endemic. If it be a disease of malarious origin, and subsequent experience and observation should prove its regular periodicity; then, in the great anti-periodic powers of Quinine, we have, as we doubt not, a most effectual remedy. Notwithstanding we know so little of the modus operandi of this great and heroic remedy for the largest class of diseases incident to southern climes, yet we do know, that its effects upon the animal economy are antagonistic to the periodicity of disease, and that it tends to counteract the pernicious influences of malaria.

The removal of the effusion, and consequent reduction of the diseased part, will be attained by the administration of such remedies as will diminish the phlogistic predisposition of the system, and increase the activity of the absorbents. The patient should be confined as much as possible to the recumbent position, and the affected member should at all times, during the course of treatment, be kept at perfect rest in the horizontal
position. Mild mercurials, as pil. hydrarg., should be administered pro re nata, and followed, at the commencement of the treatment, with a few brisk cathartics; but a continuance of active purgatives is not only unnecessary, but may prove hurtful. During the subsequent treatment, the more active cathartics should be dispensed with, and mild laxatives substituted in their stead, such as the supertart. potass. and the neutral salts: not omitting, however, the moderate use of mercurials, which should not be omitted, as they tend powerfully to increase the activity of absorption. Their use should be discontinued short of ptalism. Particular care should be taken to sustain the strength of the system, and, if necessary, recourse should be had to stimulants, and tonics, combined with a generous diet. The preparations of iodine, especially the iodide of potassium, from their well known effects upon the glandular and absorbent systems, stand unrivalled as remedies effectual in the cure of this affection.

A well directed system of compression by means of the roller-bandage, if practicable, will greatly facilitate the attainment of the desired results. The pressure of the bandage should be made from the toes upwards, and as firm as can be borne, without great discomfort, or as is consistent with the safety of the patient. The employment of severe friction, with a stimulating liniment, immediately preceding each application of the bandage, will tend greatly to accelerate the cure. The improvement for the first few weeks will be very rapid, and the re-application of the bandage often required, as it becomes loosened on account of the subsidence of the swelling. Under such treatment, in the course of a month or two, there will be found a considerable diminution in the size of the limb, or affected part. The external appearances will also be very much changed for the better. The hard protuberances and roughness of the skin become much less distinct, and in every particular, the part presents a much more natural and healthy appearance. But the bandage is not to be discontinued until long after every vestige of the disease has subsided, and this may require many months: if the treatment be too early abandoned, the disease rapidly returns. This unfortunate result actually occurred to the writer, in consequence of the neglect
of the attendant and nurse, in the interesting case herewith reported, as will be seen in the sequel of this article.

In cases where ulceration exists, as in the advanced stages of the disease, if the ulcers be large, it will first be necessary, before using the bandage, to diminish the size of the sores. The application of poultices, succeeded by stimulating and astrin gent lotions, and then dressed with adhesive or Liston's plaster, so as to approximate the edges of the ulcer, will generally prove effectual. When the ulcers are small, they afford no objection to the employment of the bandage, but on the contrary, it is one of the most efficient remedies to promote their healing, as with the contraction of the skin, and other tissues, their edges become approximated and united. The use of the knife is rarely required; but cases of severe ulceration of the leg, or insupportable pain, may demand amputation, and many cases have been followed by complete recovery. It should only be looked to as a resort when all other methods have failed to afford relief.

Case. We were requested on the morning of April 10th, 1847, to visit Peggy, a colored woman, belonging to Maj. Geo. M. Waters, a wealthy planter of this county. Upon our arrival, we were absolutely startled and confounded at the huge, misshapen, and unsightly appearance of her left lower extremity, beginning at the toes, and extending to near the knee-joint. The foot presented an enormous mass of flesh of rather a square shape, the toes being almost entirely hidden from sight, by the overlapping of a large mass of skin and flesh; about the flexure of the ankle-joint there appeared ridges of skin of considerable elevation, with intervening fissures of corresponding depths. The leg was of enormous dimensions, measuring about ten inches in diameter. The surface presented a rough, scaly appearance, with a few long hairs interspersed here and there. Upon the application of the touch, hardened protuberances were observed, with intervening depressions of comparative softness, which slightly pitted upon pressure. The entire limb, from the toes to the knee, appeared one shapeless mass, and the motion of the leg was very much impaired. In making out our diagnosis, we had no hesitancy in pronouncing it a case of
Elephantiasis, though in an experience of several years' practice, we had never previously met with one.

Treatment.—Absolute rest, in the recumbent position, was strictly enjoined, and she was directed to take pil. hydrarg. 6 grs., every other night, followed by an active cathartic on the following morning. This course of treatment was faithfully pursued for about ten days, when the pil. hydrarg. was directed to be continued, but a mild saline laxative was substituted for the active cathartic on the morning following. Hydriodate of potash, in doses of 5 grains, gradually increased to 10, three times daily, was also added to the prescription, and regularly administered. The diet was restricted to a moderate allowance of bread and milk.

A strong roller was applied from the toes upwards to the knee, as firmly as could be borne without pain, with directions to have it re-applied, as often as it becomes loosened. Previous to the renewal of each application of the bandage, active and severe frictions, with a stimulating liniment, was ordered to be made over the whole extent of diseased surface. Under this plan of treatment, the improvement was rapid. The swelling diminished so rapidly that the bandage required to be re-applied at least once every twenty-four hours.

This course of treatment, with but little variation, was rigidly pursued with the best effects, until the 1st of November following, during a space of seven months, at the end of which time, the member having been reduced to very nearly the normal size, and presenting a natural appearance, the treatment was discontinued without our knowledge.

After the discontinuance of treatment we lost sight of Peggy's case, and heard nothing more from her until about the 1st of November, 1848, just one year afterwards. Her owner then informed us that the limb had never been quite reduced to the size of the other, and had been occasionally painful; that for the last few months both the swelling and painfulness had been rapidly on the increase, and that there appeared an evident predisposition to a return of the former aggravated condition.

The method of cure previously adopted was again instituted, with only slight modification, and with the same beneficial results. In the latter part of the treatment, the depletives were
abandoned, and the patient put upon a course of tonics, with a nutritious diet. The use of the stimulating frictions and the roller bandage was directed to be continued for at least two months, after every trace of the disease had disappeared. The remedies were again discontinued in the early part of the present year, since which, to the present time, she has remained perfectly well.

We are enabled to give the following additional information in relation to Peggy, particularly as regards her early history, and the history of the disease in her case:

She was born in the Cherokee Nation, on the Etowah river, and in what is now Cass county, and has been living at her present place of abode, on the Chatahoochie river, twenty-six years; she is now about 46 years of age; her father was a full blooded Mexican Indian, and her mother a mustee; her health had been always previously good; she is the mother of seven children. The first symptoms of the disease were developed a year before I saw her: she had been under the care of another practitioner, whose plan of treatment I was unable to learn. Menstruation ceased upon her one year prior to the attack. She is very fat, her weight being 330 lbs. Her master writes me, in answer to enquiry as to her present condition, dated October 29th, 1849, "that Peggy says, when she has walked about a great deal, during the day, the extremity is a little inclined to swell, and is also slightly painful in the afternoon. She wears a shoe on that foot, and attends to her ordinary business with little or no inconvenience."

ARTICLE IV.

Remarks on the Treatment of Fractures. By L. A. Dugas, M.D., Prof. of Physiology, &c., in the Medical College of Georgia.

Although it may seem to be a work of supererogation to write upon a subject so trite and so familiar to every practitioner as that of Fractures, there are still some points upon which surgeons differ, and upon which they should therefore be heard. On the general principles of treatment all agree;
but such is not the case when we come to the details. For instance, the application of a roller bandage to the fractured limb is recommended by many and condemned by others. Among the former, there are some who advise its immediate application, and others who defer it until the inflammatory stage shall have passed. In our country, the bandage is, I believe, very generally used, and it is for this reason I propose to offer a few remarks against the propriety of such a course.

What are the ends proposed to be attained by the application of the roller or other compressing bandage to a fractured limb? They are, I believe, three-fold—viz: to aid in retaining the bones in their proper adaptation, to prevent the swelling of the limb, and to reduce this after it has occurred. A serious objection to the bandage thus used, is that its application constitutes by far the most painful portion of the dressing, especially if the limb be held for the purpose by an unskilful aid. No one who has ever witnessed the application of the roller bandage, from the toes up to the pelvis, in fractures of the os femoris, when every turn of the roller, however gently carried, imparts motion and intense pain, can have failed to wish that it might be dispensed with. Such, at least, is the case with the patient, if not with the surgeon. This evil is aggravated by the necessity, which very soon occurs, of removing and re-applying the bandage, as will be hereafter stated. Now, if the proper apposition of the fractured ends can be secured without the roller bandage, is not the difficulty and painfulness of its application a sufficient reason to abandon it? But it is also proposed to prevent, by its use, the development of swelling. Let us see if this object is ever attained. Every one knows how difficult it is to apply the roller bandage to a whole limb in such a way that the compression will be perfectly uniform, and the circulation not impeded. Even expert surgeons sometimes fail in this, and the less experienced will, of course, do so still more frequently. But, however skillfully applied, the tendency to swelling at the seat of fracture, will very soon make the bandage more tight at this point than below it: the venous circulation will become impeded; pain will supervene and increase until the patient or his friends will be compelled to cut loose the bandage, in order to release the stricture. The patient will
then have to remain with an imperfect adjustment of dressings until the physician can see him, which, in the country, may be, not only hours, but days. Cases also unfortunately occur occasionally in which, from the docility or fortitude of the patient, he does not demand and obtain timely relief from the compression, and suffers mortification to take place. One of the most distinguished surgeons of the North stated to the writer, a few months since, that he had been repeatedly called upon to perform amputation, in consequence of the tightness of the bandage occasioned by the supervention of swelling at the seat of fracture. There can be no doubt that such accidents are much more common than generally supposed, from the fact that few men are as fond of reporting their unfortunate cases as they are of heralding their successful achievements.

The third object proposed to be attained by the roller bandage, is the reduction of the swelling or tumefaction usually occasioned by fractures. For this purpose, the bandage is advised to be applied after the tumefaction shall have reached its maximum. At this stage of the case the bandage is unquestionably less objectionable than it is at an earlier period; yet its application, even now, is very painful; it is still difficult; and it may be so applied as to produce unequal pressure and consequent strangulation, with all its inconveniences and dangers. If it were absolutely necessary, these objections might be waived; but, if not, they should have their full weight in determining the practice to be adopted. It is certainly not absolutely necessary thus to reduce the swelling; and the utility of the reduction by such means is extremely questionable. That any real evil arises from such tumefaction as usually follows fractures, has yet to be demonstrated. If left to the efforts of nature it will subside in due time, without the use of any compression whatever.

If the bones can be maintained in apposition and the swelling be subdued without the roller bandage, and if this bandage cannot, without great danger, be depended upon for the prevention of tumefaction, the necessary inference is that it may be omitted without impropriety. If, again, it be true that the manipulations required for the application of the roller bandage are always painful, that they have almost invariably to be repeat-
ed once or more as the swelling progresses, that the compression is generally the principal cause of pain in the treatment of fractures, and that it occasionally induces mortification when least expected, we should conclude, not only that it may be omitted without impropriety, but that its use ought to be abandoned in general practice.

The writer wishes not to be understood as alluding here to the starch bandage recommended by the distinguished surgeon of Brussels. The number of victims to its use when first suggested remains yet to be told. Suetin, however, no longer calls it the "immovable bandage," but the "movable and immovable bandage," and, so great is his apprehension that the roller bandage, which constitutes a part of it, may be applied with a view to compression, and therefore perhaps too tightly, that he advises a bit of tape to be placed longitudinally along the two sides of the limb before the roller bandage, and in such a manner that the ends will project above and below: the roller bandage is then to be applied with only as much tightness as may be required to keep it in place; after which, the ends of the tape are to be drawn upon, for the purpose of ascertaining by their freedom of motion that the compression is neither too great nor unequal. If much swelling ensue, it will be manifested, not only by pain and the appearance of the distal end of the limb, which is always to be left exposed for inspection, but also by the difficulty of moving the tapes beneath the bandage; in which events he urges the bandage to be slit open and re-adjusted more loosely. With these abundant precautions, upon which Suetin now dwells with great earnestness, the plan is unquestionably the best that can be devised, whenever the patient can have ready access to the surgeon or to an expert nurse as soon as it may become necessary to modify the dressing.

In establishing rules of practice, whether in medicine or in surgery, authors do not sufficiently discriminate between the various circumstances in which both practitioners and patients may be situated. What may be easy and proper under certain circumstances, may prove difficult and injudicious under a different state of things. A system of practice may be highly beneficial and unobjectionable in hospitals or cities, and be entirely unsuited to the camp or country. What may be
harmless in the hands of highly cultivated and experienced physicians, may cease to be so under the administration of practitioners less skillful. It is therefore important that the principles as well as the details of general practice, be plain, intelligible to all, and of easy execution. The safety of society demands that dangerous expedients be discountenanced by the profession, especially whenever more harmless procedures can be substituted for them. The indiscriminate use of the roller bandage in the treatment of fractures, has often occasioned the most serious accidents, and should give way to the simple use of splints and bandages applied in such a manner as to admit of being modified, according to the progress of tumefaction, by any person of ordinary intelligence. Let the more complicated and hazardous processes be confined to such cases as may be continually under the supervision of the surgeon.

PART II.

Reviews and Extracts.

An Introductory Lecture: delivered in the Medical College of Georgia, November 5th, 1849. By Paul F. Eve, M.D., Professor of Surgery, &c. Published by the Class. Augusta: James McCafferty. 1849. 8vo., pp. 24.

This Lecture is devoted to a consideration of the causes which conspire to degrade the profession of Medicine from that rank in the public estimation, to which it is justly entitled. That it does occupy a position far beneath that to which its intellectual and benevolent character gives it a just claim, is too plain to admit of argument. What is the cause that has produced this unfortunate result, is a question that should engage the careful consideration of every physician who properly appreciates the dignity and usefulness of his calling. We are therefore persuaded that a brief analysis of a lecture devoted to an examination of the causes which have lowered the standing of the profession of medicine will not prove unacceptable to our readers.

The first cause assigned by the Lecturer for the low estimate of the medical sciences, is "the want of harmony among its
advocates.” It is true, as is justly remarked, that physicians exhibit little apparent unanimity, and that “doctors disagree” has passed into a proverb. Yet the differences of opinion among physicians are in truth neither greater nor more frequent than among other professions. Law and Theology each, have their written codes, yet their professors do not agree upon the interpretation to be placed upon them, hence the multiplied contradictory decisions, and the numerous religious sects. The physician has no guide but his observation of the laws of vitality, and the modifications which these undergo from the agency of numerous disturbing causes. It is not wonderful, under such circumstances, that they differ, but that their differences are not more numerous and fundamental. But the contrariety of opinion among well instructed medical men is not so great as is generally supposed.

“But differing, as we freely acknowledge we do, and well may, on so intricate and difficult a subject as medicine is known to be, still the degree and extent of our disagreements are greatly exaggerated by the community. Doctors truly disagree, must necessarily, since their science is based upon ever changing, complicated matter; but that there exists among us as contradictory and opposite opinions regarding the principles of our profession, as is generally supposed, we do most unhesitatingly deny. Because we employ various and apparently contrary agents, and people cannot understand their action, we are condemned as opposed to each other. When physicians are called to a case of fever and one proposes bleeding, another prescribes purgatives, a third gives tartar emetic, a fourth, digitalis, a fifth nitre, it is at once concluded that they differ, when in truth, they all harmonize, they are aiming at one and the same result, the reduction of the arterial action and febrile excitement. Moreover, as a purgative, one may select calomel, another some one of the various salts or oils, or senna, gamboge, scammony; or of digitalis, one might give the tincture, a second the infusion, a third the substance; and thus a hundred different opinions respecting fever alone would be obtained, still in reality they all co-operate and concur in producing the same effect.”

Another reason advanced by the Lecturer for the want of confidence in Medicine is, “that the errors of all who administer physic, are charged to the profession.”

“No distinction is now made between the regular and the
irregular practitioner, between the learned and the illiterate in medicine, between the physician and the quack. The wall of separation has been broken down by law. No license is now required to practice the healing art in these United States. Formerly it was not so. It was then thought, that so difficult and important an art as preserving health and alleviating disease, demanded some study, minute investigation, and enlightened observation and experience, to practice it with success. But our legislators have grown wiser than our fathers were, and have abrogated all restrictions in regard to the practice of medicine. In 1838, there were only four States of this mighty Union which gave any legal protection to medical science; now there are not so many. The law of Georgia offers a premium to empiricism and dishonesty, by declaring a regularly educated physician shall not collect his dues without a license, but exempting by special provision, "the Thomsonian or botanic practice, or any other practitioners of medicine in this State:" these are the very words of the Act."

Among the causes of the degradation of our profession enumerated, this is one of the most potent. The land is overshadowed by quacks and impostors, who arrogate to themselves the title of doctors of medicine, and are recognized as such by a large portion of the community. The blunders of these men are charged to the profession of medicine, and their arrogant denunciations of principles which are universally recognized among intelligent physicians as established upon immovable bases, tend to confirm the popular error that there is nothing certain in Medicine. But, besides these, there are too many among those who have been regularly educated, who, seduced by the prospect of pecuniary gain, or moved perhaps by other less unworthy motives, embrace some of those empirical systems which the verdict of the great mass of enlightened physicians has condemned as utterly repugnant to correct observation, and in many respects, to common sense. Such individuals do more to discredit Medicine among the intelligent portion of the community, than the whole tribe of self-styled doctors who prey upon the popular credulity.

"A third cause for the present unfavorable opinion respecting our profession is, that it is judged by those unqualified to form a correct decision."

"To prove that the community is not prepared to render a
correct opinion of the importance of medical science to society, we need only refer to the custom and practices of the day. The whole system of empiricism is founded upon public credulity, in what is novel, marvellous, or mysterious in treating diseases; and in the popular supposition, that every one can best judge what is good or hurtful to his own system. In conformity to these views, we find every person recommending, and that most strenuously, some favorite prescription, some peculiar system of practice, or some nostrum. So universal is this habit of prescribing, that for any complaint whatever, one may instantly obtain a thousand pretended specifics. No man ever thinks of committing the navigation of a ship to an un-educated sailor; but for derangements of the human system, the most ignorant are often implicitly trusted. It was once thought, that no one having a conscience would ever prescribe, order or suggest medicine for a sick person, without he had previously obtained a medical education. But now, even timid women, boldly assume that difficult and responsible task, and have no hesitation to criticise the prescriptions of physicians."

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"But the most striking proof, that the public are not qualified to render a correct judgment upon the medical profession, is the prejudice which still prevails to some extent against it. Against human dissection popular indignation has been chiefly directed; and with such success, that in but one State, (Massachusetts) has the study of anatomy been legalized; in all others, to dissect is a penal offence, subjecting the offender to fine and imprisonment. Physicians are also liable for damages if they commit errors in practice; and our actual position is this—for procuring or using the only means by which we may comprehend our science we are punished; and again we are made to suffer, if our knowledge is not perfect on the subject. The law is held over us in terrorem if we dissect; and on the other hand, we are mulcted in damages, if we do not know that which we can only by dissection. That the dead must be examined for the good of the living, all must admit, however repugnant it may be to our feelings; for in the quaint but emphatic reply of Abernethy, before the government of Great Britain, when interrogated on the subject of human dissections, all ought to know, 'that if the dead be not mangled, the living will be.'"

The cause to which reference is here made lies at the foundation of many of the others, but it is one for which there is no direct remedy. It is impossible that any community should
ever acquire such a knowledge of medicine as will fully qualify them to sit in judgment upon the claims of medicine to a rank among the sciences, or to determine the degree of individual attainment. We pass on, therefore, to an examination of the fourth reason why medicine has not a higher rank among other learned professions. "It has not received from either government or people, the same protection, encouragement and fostering care that others have."

It has been justly remarked by a late French Journal, (Revue des Connaissances Medico-Chirurgicale,) that republics have never been favorable to physicians. In the republican Rome, they were slaves: the first French republic abolished the Faculties of Medicine—the present republic is about to rob them of their last obolus. Our republic manifests an equal disregard for medicine. It is well known that our State governments, so far from giving to it the encouragement that an enlarged policy would dictate, and which is its just due, by endowing institutions, and protecting the rights of those legitimately engaged in its practice, actually encourage empiricism, and oppress the physician. He pays a heavy professional tax, which gives him no privilege, beyond those possessed by other occupations which pay no such tax; he is compelled to serve on juries, and in the militia, and is universally expected to expend time, health, and even life itself in many instances, upon the indigent sick, and that too without the remotest prospect of compensation. The general government, so far as its limited powers permit, pursues a course equally unjust. When the trump of war is sounded it calls into service a large number of medical men, and whilst rigidly exacting from such as may seek its service, the most thorough preparation for their work, they withhold all reward beyond the mere pittance which the law allows. The recent war with Mexico affords many striking illustrations of this fact.

"In the recent war with Mexico, every officer who distinguished himself was promoted, some twice and even a third time being brevetted. Others again who had never even visited that country were also advanced in rank. We read of medical men in both the regular army and volunteer service, performing most arduous duties during the whole campaign; of their great efficiency as a corps; of the gallant deeds of several
among them; of the deaths of others, even under the fire of the enemy; but of all these surgeons and assistant surgeons, where is the promotion recorded of the first among them; where the special honor or reward bestowed, by government or the community, upon a single physician who served in Mexico? All other officers have been advanced, some of them most rapidly; but not the slightest mark of distinction has been yet conferred upon a single one connected with the medical profession. Similar to this disregard of our army surgeons, is the recent decision of the executors of the queen dowager of Sardinia; who left by her will, that all her household officers should continue to receive their salaries during the rest of their lives. It was determined that her medical attendants were the only persons not entitled to this boon. By the laws of Georgia in relation to contagious diseases, provision is made for all others, even for the payment of nurses to the sick; but not one cent appropriated to physicians who may be called to attend them. Well has Professor Simpson exclaimed, "the lancet of Jenner has saved more human lives than the sword of Napoleon destroyed. On the devastating European wars following the first French revolution, England lavished millions of money, and freely bestowed honors, peerages, and heavy annual pensions, upon soldiers who were most successful in fighting her battles, and destroying their fellow men; she grudgingly rewarded Jenner with twenty thousand pounds for saving twenty thousand of her subjects annually!" No less than one hundred thousand human lives are annually saved by vaccination alone. What a glorious boon is this from medical science to humanity!"

The fifth and last reason advanced by Prof. Eve for the unfavorable opinion entertained by the public, is, "that as a science Medicine is the most difficult, obscure, and complicated of all others."

"The fifth and last reason we shall advance for the unfavorable opinion entertained by the public for the medical profession is, that as a science it is the most difficult, obscure and complicated of all human learning. No other occupation in life involves such varied and minute knowledge, such careful observation of nature, such constant and absorbing study, such heavy responsibility. The principles of other sciences are well defined and are unchanging, as they are founded upon inanimate matter, in which their actions are regular and uniform, and can therefore be calculated on with certainty. Medicine, on the contrary, has to do with that which is in continual turmoil, and subjected to a thousand varying circum-
stances and affecting causes. Our science rests in fact upon human life. Now, besides the direct evidence given us by revelation, daily observation teaches us the great uncertainty of this—of all earthly events, death may be considered the only one absolutely certain. If then medical science is based upon so shadowy and fleeting a thing as human life, what must necessarily be its character? Can the practice of medicine ever be certain?"

The Lecturer has stated before, that mankind were not qualified to form a correct estimate of our science. Medicine is not a single science, but a combination of several, and among them, some not easily acquired. The public, we repeat, cannot acquaint themselves with these branches of knowledge to an extent that will enable them to form a just estimate of their character. Medicine, like Religion, will be judged by the characters of those who profess it. If all physicians were honorable, intelligent, and skillful, our science would soon occupy a high rank. In the absence of all other means of forming a proper estimate, men look to the general intelligence exhibited by the practitioner of medicine. If he is ignorant upon all those subjects with which every well educated man is acquainted, the community will place a low estimate upon him, and upon the profession of which he is a recognized member. How can a non-medical man entertain a high regard for a science which enrolls among its votaries, men who are grossly ignorant of every other branch of human knowledge—how draw the distinction between the Charlatan or nostrum monger, and the regular physician, if he finds both equally ignorant of those subjects of general knowledge, with which he himself is acquainted. It is the deficiency in the amount of literary and general scientific attainments among too many medical men, that has lowered the character of the profession and caused it to be no longer considered, one of the "learned professions." If none but well educated men were to engage in the practice of medicine, a higher position would at once be conceded. We do not mean that every physician should be a thorough classical scholar—though we doubt neither the value nor importance of classical learning—but every one should possess a reasonable amount of general literary and scientific knowledge. We are aware that some very able physicians have labored under
this deficiency, but we venture to assert that it requires an unusual amount of intellect to raise one to eminence who is thus situated.

Various schemes for the advancement of the medical profession have been proposed—free medical schools—longer courses of lectures—change in the modes of licensing, &c.; but all these, valuable as some of them doubtless are, will prove fruitless, so long as the medical profession continues to enrol in its ranks, so many who are deficient in the very elements of a literary or scientific education.

The Kidney in its Relation to Scarlatina.—Semeiology. By James Miller, M. D.—(London Lancet.)

The recent epidemic of scarlatina, has furnished an ample opportunity of studying, in all its bearings, the important affection known by the name of scarlatinal dropsy, or more commonly, dropsy after scarlet fever, the following remarks on the disease in its connexion with the eruptive period, being the result of a somewhat extended observation of the epidemic in the practice of a public institution.

The subject matter of these observations were enunciated, for the first time, in a short paper I had the honor to submit for discussion at the medical and Chirurgical Society of London. I shall avoid, therefore, treating of points solely open to disputation, but embody the substance of the paper in the following pages with the more practical detail; filling up, as it were, the various parts of a sketch, of which that might be considered the mere outline.

In an endeavor to treat of the pathology of this affection, in the widest acceptation of the term, the first part of these observations will consist of a detail of the symptoms, and, in as far as seems admissible, the ratio symptomatum. In the next place, cases will be given, illustrative of the symptoms and course of the disorder; and lastly, that branch of the pathology which has more especially morbid anatomy for its basis, with the general indications of treatment.

The prominent feature of this malady, indicated by its name, that almost invariably claims our attention, is dropsy; and, in addition to it, a very marked anaemia. They are those symptoms first obtruded on our notice as sequelæ of a scarlatina rash. As in true Bright's disease, of which this affection is the prototype, it is a general dropsy, and for the most part associated with other symptoms of an acute character. It either
occupies the entire body, or certain localities simultaneously, or successively, which circumstances stamp it with a general character.

It would be quite foreign to the intention of this paper, to treat of the theory of dropsies; but of the acute general dropsy, which, as a symptom, is now under notice, it is necessary to point out some of the leading and distinctive peculiarities.

 dropsy may be said to be not less a disease proper to the bloodvessels than to the blood itself; plethora or distention of the capillaries, more frequently originating on the side of the veins, leading to a permeation, of serous fluid on the one hand; on the other, a manifest alteration in the physical and chemical qualities of the circulating fluid. Either of these elementary conditions may primarily and alone tend to the production of dropsy, or both may mutually concur to produce the same pathological result. Dropsies are either strictly local or general. Local dropsy, properly so called, is invariably a disease pertaining solely to influences acting on the bloodvessels, and whether obstruction exist near to, or remote from the heart, all parts on the distal side of an obstructed vein, will be found more or less the seat of serous infiltration.

The only general dropsy which has sole reference to the vascular system, is that form termed by writers cardiac. Its general character is marked by simutaneous or successive serous effusions, more or less remote from the centre of the circulation, but it wants many of the characters of renal general dropsy, whether acute or chronic—a form essentially combining a lesion of the blood as one of its main inducing causes. I may venture to say I have rarely seen general dropsy occupying the entire superficial areolar tissue, which was ascribed to cardiac disease, that had not conjointly a renal origin. This is well shown in those affected with disease of the heart and lungs, combining hypertrophy and dilatation, with mitral regurgitation and chronic congestion of the pulmonary vessels, (veins.) An effusion into one or more of the serous cavities of the chest occurs. Increasing oedema of the legs, beginning at the feet, is observed. At a later period, in the general trouble of the circulation, congestion of the kidney takes place, supervening, and favoured, or not, by anterior chronic changes in the organ; the urine becomes scanty and coagulable, and all the features of renal are superadded to the cardiac dropsy, such as infiltration of the integuments of the thighs, buttocks, scrotum, abdomen, and more especially the face; the last, which, in disease of the heart, is more of a turgor, now becomes converted into the characteristic oedema.
The main feature of the acute general dropsy of scarlet fever, is the sudden occurrence of anaemia, a circumstance owing to the arrest of the deputrating function of the kidneys, and certain important changes induced in the physical and chemical qualities of the blood. Superadded to dropsy, it imparts the well-known condition leuco-phlegmaica. Such changes occur simultaneously with the general plethora induced in the capillary system by the interruption to the circulation at the kidney—in common words, the cutting off or obstruction to the vascular circle at that point. The importance of the vascular system of the kidney to the general circulation, may be estimated by the relative size of its arterial and venous trunks with those from which they spring or join. The importance of the renal secretion must also be viewed solely in relation to its balancing or compensating secretion—viz: that of the skin and digestive surface. The occurrence of general-surface oedema, the characteristic of renal dropsy—effusions at one and the same time into various serous cavities—fluxes, such as diarrhoea, bronchorrhoea, and albuminuria—can be well conceived in a disease affecting an organ that exerts so universal an influence over the systems of circulation and secretion. Renal dropsy, then, may be either acute or chronic, according as the vascular system of the kidney becomes suddenly or slowly hyperaemic, but is invariably and necessarily associated with anaemia or apparent bloodlessness.

It is difficult to leave this point without alluding to another general dropsy, essentially a blood-disease, but always of a chronic nature. I allude to that arising from acute or chronic suppression of the menstrual secretion. The occurrence of anaemia is marked from the first, pointing out the important changes effected in the blood through an arrest of the depurating office of the uterus in its gland-like capacity; and not until this condition has existed for some time, does a slow and ill-defined general dropsy become apparent. This is probably sooner or later hurried, and the plethora of the capillary system passively induced, by a weakened condition of the heart, from long deprivation of its normal stimulus, red blood. These forms of general dropsy may be superadded to the cardiac, stamping it with the impress of their respective characters.

The preceding observations are simply to express in general terms, the effect of derangement of important secreting structures on the blood. The converse of the general proposition, is equally maintained by pathologists. Obscure "disorders of the general health," attended with anaemia, will, on more close examination, however, appear oftentimes to arise out of some impairment of important secreting structures. The skin, for
instance, in those long withdrawn from light and pure air, as in miners, certain classes of artizans, &c.; the lungs in their gland-like capacity in chronic phthisis; the uterus, in obedience to the law of puberty, failing to act on the blood at its appointed period, &c.

To return from this apparent digression from the subject to anæmia as it exists in connexion with dropsy, we see that their simultaneous occurrence is indicative of disturbance of an important secering organ, invariably arising from some acute or chronic change affecting its circulation. It seems that in this special renal affection, anæmia would claim our consideration prior to the general infiltration of the tissues; and so it almost invariably does in the more chronic cases. As symptoms, however, they are inseparable, viewing them in connexion with their true cause, the renal disturbance.

These, anæmia and anasarca, are ushered in by fever of an inflammatory type, of greater or less intensity. After a very obvious malaise, of no definite duration, sometimes dating from the disappearance of a scarlatina rash, a rigor occurs, often attended with cephalalgia and vomiting. The rigor amounting, in many cases, to a mere chilliness, is more rarely exalted into a paroxysm of general convulsions, especially in very young children. The functions of the sensorium may be much disturbed, from the first accession of fever, and active delirium, dilated pupils, with partial or complete insensibility, may take the lead. The pulse, under these circumstances, is often very slow, but on the occurrence of reaction without head-symptoms, it is frequent and hard; the breathing is accelerated; the heart's movements are tumultuous. We are generally led, from the first, to auscult the chest, and not unfrequently surprised to find the physical signs of thoracic inflammation absent. The first stage of pneumonia, a roughness with the first sound of the heart, or signs of inflammation of one or more of the serous cavities of the chest may, however, at this period, be detected. The abdomen, generally complained of, is now tender on pressure; the patient is intolerant of manipulation about the loins, hypogastria and umbilicus, and often have I believed peritonitis to exist, where the kidney was solely the seat of disorder. Simultaneously is the urine frequently suppressed, or very scanty, the patient passing, for many hours, only a few bloody drops. I have observed not more than an ounce passed for three days in succession. Under these circumstances, even the fluid is rarely above the normal density, and varies much in its degree of coagulability. With these symptoms, the dropsy increases and becomes general, making its appearance at an early period, in the face, about the legs and trunk of the
body, and lastly, in one or more of the large serous cavities. The intensity of the general symptoms is by no means, directly proportioned to the extent of dropsy or amount of serous effusion; of course omitting the consequences of pressure upon the heart, lungs, or brain, as probable contingencies of the disorder. An absence of dropsical symptoms, by no means an unfrequent occurrence, is oftentimes associated with severe constitutional disturbance, and very great serous infiltration or effusion, is often accompanied with unimportant symptoms. At this period, anaemia, or apparent bloodlessness, is very marked, however acute the attack of renal dropsy, and the symptoms, at an early period, either assume a chronic form or subside altogether. Such, however, may be developed so gradually as to merit the name of a chronic or subacute affection; anaemia, general dropsy, with a hard pulse and slight febrile movement, occurring from the very first.

The more important symptom, albuminuria, usually considered essential to confirm the diagnosis of this affection, I have as yet only indicated, being desirous of showing how far anaemia and dropsy, with other symptoms, may be significant of renal disturbance. Dropsy and coagulable urine were scarcely more than shown to co-exist long before the law of albuminuria and a special affection of the kidney was propounded by Bright. The law alone is it which for the first time has placed the kidney in its true relation to scarlatinal dropsy. Almost coetaneous with the general dropsy, the urine is found coagulable, and the slightest febrile movement, during suspected convalescence from a scarlatina-rash, at any period of the desquamation-process, is a signal to institute an examination of this secretion. In the very acute seizure it is, as before mentioned, sometimes suppressed or very scanty; tinged with blood; of moderate or strong coagulability, and loaded with amorphous deposit on cooling. If sufficient be procured to ascertain the density, although scanty, it will not be found to range above the normal standard, unless heavily laden with lithates. Hæmorrhage may take place from the kidney and the urine be profuse. Under such circumstances, it is invariably of low density. A copious urine in the absence of hæmaturia is equally low. A mutual relation may be observed between the quantity and coagulability of the urine and the general dropsy. As a general rule, the degree or intensity of albuminuria or hæmaturia is inversely to that of the dropsical affection. This is merely the result of observations made in numerous and varied cases, and I have long noticed the generality of the fact.

A very slight anasarca and albuminuria may, independent of other internal phlegmasia, be associated with symptoms of
great intensity, due, probably, to both the capillary vessels generally, and those of the kidney, failing to relieve themselves in the ordinary mode; the dropsy being simply an unloading of the capillaries in a state of plethora, on the one hand; albuminuria, a similar depletion of the kidney, on the other; hæmaturia, a more complete sign of the spontaneous depletion of the organ. Albuminuria and hæmaturia, further, are not apt to decline, pari passu, with the dropsy and other symptoms. Towards the close of the latter, the patient is to all appearance convalescent; the urine often observed to increase or maintain a high degree of coagulability, protracting itself to an indefinite period while the patient remains in an anaemic condition. In proportion as the quantity of albumen is on the increase, the density of the secretion usually falls—a circumstance due principally to a deficiency of the proper constituents of the urine. A higher specific gravity, with decreasing coagulability, mark the returning eliminating function of the kidney. Long after the disappearance of albumen from the urine, the secretion often remains copious and limpid, and of very low density, (from 1005°—1010°,) showing that, although albuminuria may be absent, the proper function of the kidney has not been yet restored. I have, however, met with several instances in this disease, and in the acute renal anasarca, said to follow exposure to cold, in which the urine has, early in convalescence, attained a density of 1035°—1040°, and yielding, on the addition of nitric acid, a solid mass of the nitrate of urea. Here we have the kidney ridding the blood of its excess of urea, and restored to its proper function as a secreting organ. At various periods of this disorder, the urine will be found to contain, on microscopic examination, blood, casts of the tubuli uriniferi, apparently consisting of cohering cylindrical masses of epithelial cells that have been thrown off together. Hence the term desquamative nephritis, usually now applied to this affection of the kidney. Fragmentary casts, and others bearing only the impression of the secreting cells, are usually seen at the same time; mucus, and more rarely pus cells; vegetable cells of various sizes, many resembling, in form, the yeast plant, some smaller; others elongated, (entophytes ?) may be observed at different times. Of salts, the amorphous deposit of urate of ammonia, and rhomboidal crystals of uric acid are the most common. They seem to occur at all periods of the disorder, and no rule can be established for the conditions of their appearance or absence. More rarely, oxalates are discernible. Crystals of the triple phosphate of ammonia and magnesia appear frequently, as the result of early decomposition of the urine, and various animalecæ (entozoa ?) are equally seen in specimens recently passed, as in others long kept for examination.
1850.] The Kidney in its Relation to Scarlatina. 97

Whether does the general anasarca with anaemia or albuminuria claim priority in the order of symptoms significant of disturbance of the renal circulation? The dropsy, as I have before stated, is usually first noticed, and not unfrequently many hours, or even days, may elapse, ere albuminuria forms one of the symptoms. Albuminuria more rarely may be absent from first to last, or general anasarca may not make its appearance during the entire progress of the disorder. Cases of anasarca succeeding scarlatina without albuminuria, have led some writers, Rayer especially, to ascribe the dropsy to any other, in preference to a renal origin. From this opinion I differ, fully believing that a certain form of dropsy, with anaemia and other symptoms, are as characteristic of renal disturbance as with the ordinarily associated symptom, albuminuria.

The preceding symptoms, acute or not, differing in degree only, are of a strictly inflammatory character, and significant of acute congestion of the kidney. Another important feature in the pathology of this disease, is the very frequent occurrence of inflammation set up at the outset, or succeeding the renal attack. The most prominent are pneumonia, and inflammation of the serous and synovial membranes. The occurrence in true Bright's disease, as consequent upon the changes produced in the blood by the kidney affectation, has been conspicuously set forth by Christison, Taylor, and other pathologists. The more frequent complication of inflammation of serous membranes, almost makes it appear as if the blood, contaminated with urea, selected those delicate structures, and acted directly upon them as an irritant poison. It is probably this immediate contamination of the blood, superadded to the renal congestion, as well as the frequent occurrence of secondary inflammation, that tend to maintain the inflammatory character of the fever and general dropsy.

As an important practical feature of this disease and its associated or secondary complications, it remains to be shown how they differ from those more strictly denominated idiopathic inflammations. However acute the symptoms of invasion, or with whatever degree of intensity secondary inflammations may set in, a remarkable proneness to asthenia or failure of the heart's power manifests itself at an early period of the disease. In the pneumonia, pleuritis, peritonitis, or severe uncomplicated form of the disorder, whether the treatment adopted be such as may be termed active or not, this tendency is invariably shown, and the patient will often succumb under the best advised remedies. This important feature is one of the utmost practical moment—that during the course of the disease a want
of muscular power is invariably manifest; and death, in the absence of cerebral complication—a rare occurrence—is brought about by asthenia or failure of the heart's power and action.

Scarlatinal dropsy occurs generally at some period subsequent to the eruptive stage of the fever; and various writers on particular epidemics, more than usually characterized by this affection, have fixed the twenty-first day as the most frequent of its appearance, and that during the process of desquamation. Wells, Pleneiz, and Hamilton may be named among the more distinguished writers on this affection. The desquamation characteristic of scarlatina is more manifest in some cases than in others. A very perfect desquamation may occur where only a scarlatina fever without a rash has been observed, and cases accompanied by prolonged and vivid eruption sometimes exhibit only a partial desquamation. Others are observed where the rash is very trivial, the throat affection severe, (scarlatina anginosa,) and desquamation scarcely or ever at all perceptible. During this period scarlatinal dropsy is said usually to manifest itself, and as a general rule I believe it is a correct one. Desquamation is a true sequela of one of the primary actions or effects of the scarlatinal poison, and the scarlatinal dropsy, in consequence of being invariably supposed to occur at this period, has also, by every writer on the subject, been termed a sequela of scarlatina. The question now almost forces itself upon us, whether is this affection the result of supposed cutaneous action taking place during the desquamation-process, in the milder cases especially, as is usually ascribed, and those in which the patient is most liable to an early exposure to cold, and giving rise, in consequence, to congestion of the kidneys; or is it the result of the specific operation of the scarlatinal poison at some period of the disorder not exactly ascertained, producing by its direct action on the kidneys, a symmetrical hyperæmia of the organs themselves? Many facts derived from the recent epidemic, explicable solely by the laws of the action of morbid poisons in the human economy, favor the latter supposition.

Scarlatinal dropsy, as I have stated, has been invariably termed a sequela of scarlet fever. Adopting the first theory or explanation of its renal origin—viz., a secondary action or reaction of the cutaneous capillaries due to a primary impression made on the surface of the body during desquamation only, as in the instance of acute anasarca following sudden or prolonged exposure to cold—few would be disposed, viewing it in that light only, to consider it other than a sequela; but regarding it as one of the primary effects of the direct action of the poison of scarlatina on the kidney itself, it becomes entitled to
be considered with the primary disease. Many of the facts contained in the cases given in the sequel tend to show that it does result from a primary or direct action of the poison of scarlatina upon the kidney itself; while others further indicate the necessity of considering it as a distinct form of scarlatina. Regarding it, however, in either light, we observe scarlatinal dropsy occurring during suspected convalescence, either as an acute affection, or one more chronic in its nature, at some period or other of the desquamation-process, or, more correctly, some period subsequent to the well-known phenomena of scarlatina; sometimes immediately after, prior to desquamation; very commonly on the twenty-first day; often much later; and frequently after the healthy function of the skin has been restored. As a general rule, the more acute the attack, the sooner is it observed to follow the disappearance of the rash. At a later period a more acute form attends. "The actions of morbid poisons," says the late Dr. Williams,* "like those of medicinal substances, are variously limited, some affecting only one membrane or organ, while others involve two or more systems of organs. That of scarlatina acts more especially on the mucous membrane of the fauces, also on the skin, the synovial membranes, and also on the peritoneum, occasioning ascites."

He further says, "when morbid poisons act on more tissues than one, their actions are sometimes simultaneous, but more commonly they are consecutive, and frequently long intervals of time elapse between the successive attacks. In scarlatina, the peritoneum is not affected till many days after the eruption of the skin and ulceration of the throat have altogether disappeared."

"In typhus fever," says Dr. Gregory,† "in rheumatic fever, we observe the implication of internal structures. These most serious aggravations of eruptive malady, whether denominated secondary or tertiary, may occur at all periods of the exanthem. They may accompany the first burst of the eruption; they may develop themselves gradually during the maturative stage, but they prevail principally towards the decline of the disorder, and in the course of secondary fever." "Further," he says, speaking of scarlatina as compared with small-pox and measles, "the variety of organs secondarily implicated is still greater. The eye, the ear, the heart, the liver, the kidney, the peritoneal surface of the bowels, may each in turn be the seat of superadded disorder. In certain cases, the morbid poison acts as directly on these internal structures as it does on the skin." The preceding passage only indicates

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* On Morbid Poisons.  † Lectures on the Exanthemata.
the point I am desirous of illustrating, admitting, as it does, a
direct action of the poison of scarlatina on the kidney, at the
same time stating that such "is not a normal course of the ex-
anthematous disorder." In that part, however, which treats
immediately of the affection in question, no mention is made of
the kidney, saving in reference to its secretion, and numbers
the dropsical affection among the sequelæ of scarlatina. "The
anasarca," says Dr. Gregory, "is curable in a large proportion
of cases, a circumstance which proves that the dropsy often
depends on no serious disorganization about the heart, but ra-
ther on the continuance of inflammatory action in the cutane-
ous capillaries, and long absence of perspiration." Dr. Wil-
liams numbers this affection among what he terms tertiary
actions of the poison, "the dropsy being usually limited to a
disordered function of the cellular or serous membranes; but
in a few cases it is preceded by inflammation of the pleura,
and, in either case, languor, feverishness, &c., precede it for a
few days."

This author distinguished the primary effects of a morbid
poison from the secondary and tertiary by the two latter alone
exhibiting specific effects. The primary effects are simply
fever, which would be, in short, the first manifestation of any of
the exanthematous poisons operating on and disturbing the
functions of the nervous centres, in reality the first visible
effects of the poison in its latent condition, the period of latency
or incubation being, as contra-distinguished from the pheno-
mena of eruption, &c., the unknown, the latter the known and
manifest effects of the operation of the morbid miasm. The
secondary effects are, then, according to this author, the
primary specific effects—the tertiary, ulterior and less definite
effects.

Believing that a greater difference is made between the
primary and secondary manifestations of a morbid poison than
in reality exists, the actions of the scarlatinal poison will be
confined in these observations to their open, known, or primary
specific actions, bearing in mind the law, "that when morbid
poisons act on more tissues than one, their actions are some-
times simultaneous, but more commonly consecutive, long
intervals of time elapsing between each successive attack;
and that morbid poisons, also, which act on a plurality of
tissues, are prone to exhaust themselves on one or more with-
out affecting the whole series." This law is well illustrated in
the phenomena of scarlatina maligna, the force of the poison
being almost always wholly expended on the tissues of the
throat. It is, moreover, well illustrated in the dropsical affec-
tion, or properly, the affliction of the kidney, the intensity of
the poison exhibiting itself in this organ, as a general rule, inversely to that upon the skin and throat, the former especially. The anginose form of scarlatina seems to combine both skin and throat affection, the latter being the severer of the two. Frequently, however, very little rash is observable in this form, and then the attack tends to the malignant type of scarlatina.

On Scarlet Fever. By Dr. Schneemann.—(London Lancet.)

The advantages of the treatment now about to be laid down are, the annihilation of the injurious effects of the exanthem on the functions of the skin. The skin (by this treatment) is not, indeed, protected from the eruption, but this is so modified that scarcely any desquamation takes place, and the functions of the skin, instead of being disturbed, and burthening other functions, produce, by their continuing in a state of integrity, so beneficial an influence on the organs attacked by the malady, particularly those of the throat, that the normal condition is in every case, and in every part, speedily restored. In order to realize such extensive promises, we must bring into operation the following rules of practice:

Applications.—"From the first day of the illness, and as soon as we are certain as to its nature, the patient must be rubbed every morning and evening over the whole body with a piece of bacon, in such a manner that, with the exception of the face (?) and hairy scalp, a covering of fat is everywhere applied. In order to make this rubbing-in somewhat easier, it is best to take a piece of bacon the size of the hand, choosing a part still armed with the rind, that we may have a firmer grasp. On the soft side of this piece, slits are to be made in various directions, in order to allow the oozing out of the fat: and this is still further promoted by placing the bacon, for some time previously to using it, near the stove,—in the oven, or on the hob. But it is not proper to make the friction with a warm piece, and the fat must be allowed to cool before using it."

"The rubbing must be most conscientiously performed, and not too quickly, in order that the skin may be regularly saturated with fat. During the process, the body is never to be wholly uncovered, but only that part on which the operation is being performed, and if considered necessary, the whole can be done under the bedclothes. But such precaution as this is unnecessary; the children may safely get up. No injury will ever be done by it, and after once seeing it done, the mother or nurse soon learns to relieve the medical man of his task."
"Although this plan, from the mess it makes, is not calculated to find favour in the fine world—although it dentries bed and linen, as well as the persons of the children, yet the first few days of its application produce results which make all this forgotten, and inspire the mothers with enthusiasm for this method. With a rapidity bordering on magic, all, even the most painful symptoms of the disease are allayed; quiet, sleep, appetite, and good humour, return, and there remains only the impatience to quit the sick-room. To obtain this, however, other things are necessary besides mere infliction with fat, but still I think myself bound to impute the most important share of the merit to this peculiar treatment of the skin. The truth of this assertion will appear from a citation of the first results which follow on the treatment indicated."

"1. The improbability, I might say impossibility, of the patient getting cold while the skin is thus covered with fat; a point in no disease more important than here; were this the sole benefit of the fatty infliction, it would still be of great service."

"The dry brittleness of the skin, and the tormenting itching, are by it not only materially alleviated, but for the most part fully put a stop to. Every practitioner knows how often the itching and burning of the skin in scarlet fever are unendurable to children, keeping them constantly in distressing movement, and robbing them of sleep. Hence, children are generally well satisfied with this rubbing-in, and often ask for a repetition of the proceeding long before the time is come."
quamation takes place under this treatment, so that, in fact, the functions of the skin are maintained in full integrity. Later observation, however, convinced him that, with all possible care, desquamation to a certain extent will ensue. This he communicated to me, requesting me to insert it in the translation. To resume.)

"4. With this disappearance of the desquamation disappear all those bad symptoms which attend on it. This feature alone of this method of treatment, will have its weight with the practitioner in all ages."

"In order now to give a striking proof of the importance and the bad influence which the interrupted functions of the skin produce on the healthy activity of relative, even if distant, organs, I may cite the fact, that death is always the result where more than one-half of the skin has been destroyed by fire or boiling liquid. Sooner or later such is the case."

"A similar destruction of the skin ensues in scarlet fever, with this difference, that it takes place gradually, and thereby the organism is better enabled, by employing all the activity of the body, to find aid against the mischief which, to the injury of the patient, must result from the cessation of the functions of the skin."

"The oxidation of the blood is thus considerably promoted, the interrupting of which is the cause of such serious phenomena."

"As the disease of the throat is not improbably in great part due to the interruption of the functions of the skin and lungs, it must naturally disappear, or not present itself, where these are continued in integrity; and such is found in practice to be the case."

"6. Owing to the fatty covering, the skin is kept in a moist state, and the cuticle thrown off cannot be driven about the room by currents of air, as happens where the patient has been kept dry; and thus one fertile source of infection is kept closed up, it being well known that infection is most easily communicated at the period of desquamation. The author believes, not only that such is the case, but also that by this method the danger of infection under any circumstances is materially lessened with the disappearance of the eruption from the skin; inasmuch as the process of generating infectious material is interrupted by restoring the skin to its normal state, a point of which he need not point out the importance."

"7. By shortening the period of desquamation, and protecting the patient against the sequela of the disease, the duration and treatment of this can be shortened to a period of six to ten days—an immense advantage to the patient and his relatives, particularly as he is always liable to relapses, and is, even in mild cases, considerably weakened."
"8. The remedy is (cheap,) harmless, practical, and is perhaps never counterindicated.

"The linen must not be too frequently changed, as a clean shirt takes up more of the fatty matter than one already saturated, and hence the skin is sooner deprived of its fatty covering."

'The rubbing-in is to be kept up twice a day for three weeks, and once a day during the fourth.'

'The patient is, after this, to be daily washed with cold water and soap, and then only, is the warm bath to be commenced."

"This process does not, as has been argued in some colleges, interfere with the natural course of the malady, and thus expose the individual to second and third attacks."

"In severe cases the remedy may be repeated three or four times within the twenty-four hours. The main point is to keep the skin always cool and moist; and here, even with all possible precaution, the skin will sometimes come off in certain places. But cases of this kind are only unimportant."

"The practitioner will do well to fix the exact hour at which the rubbing-in is to take place; it will then most probably be better and more regularly performed."

"Other points, which are also important enough, now remain to be noticed."

Temperature.—"The free admission of cool air in a case of disease where heat is one of the great features, is as natural as an idea, as it is beneficial in practice." Dr. Schneemann quotes a long list of authorities to show how beneficial cold washing has proved in this disease, and says, "All this goes to prove that it requires no great daring to keep the patient cold instead of hot;" 'but no cold washing is to be employed, as it promotes desquamation. Cool air seems to have a bracing influence on the system, and a soothing one on the respiration; and all danger is avoided by the fatty covering. The temperature of the bed-room should never be above 13° R. Keeping patients warm, and giving them warm drinks, is adding fuel to the fire. The idea of throwing back the eruption by mere cold air is an error; a scarlet-fever patient is, by the increase of the vital generation of warmth, more fully than another, protected against this; and great heat is much more likely than cold to check it, seeing that an acute cerebral affection is generally at the ground of this (the retrocession.) In fact, the fatal cases of this kind are principally those where, through keeping the patient too hot, the cerebral affection has been brought on; this has given rise to paralysis, which appears sooner in the skin than in other parts, and thus to the withdrawal of the eruption, for the skin dies sooner than other parts, as shown in collapse, where mustard poultices do not draw as in other states.
Bed.—'The patient should not remain in bed any longer than is absolutely necessary. As soon as the fever, headache, and a desire to remain in bed are gone, he may quit it, for in bed the skin is between two fires,* and the functions of the body do not go on so well as in moving about. Hence, even when the patient must lie down an hour or two daily, he should still go about the rest of the time. Nor must he have on too warm clothing.'

Diet.—'The diet should be light, but there must be no starvation, and as rapid a return as possible to the usual food.'

Washing.—'Although it brings on desquamation, it will be as well to let the patient occasionally wash his hands and face with water and soap.' It reconciles him to the dirt attendant on the rubbing-in.'

'If constipation ensues, it must only be combated with medicines, when at the end of forty-eight hours it makes no semblance of disappearance. Then a clyster of poppy oil is the best remedy.'

"The treatment, to be successful, must comprehend all these means. The author begs to enter his protest against a partial employment of the remedies recommended.

The only inconvenience Dr. Schneemann has remarked, where the patient goes out on the tenth day, is, "a little stiffness of the neck, which, however, passes off in twenty-four to thirty-six hours, and requires no remedies of consequence."

Complications.—§ 1. Severe cerebral symptoms at the commencement of scarlet fever.

'The above method of treatment can naturally only be applied where time is allowed for the development of the restorative process, whereby the re-establishment of order in the system is produced. Occasionally the case is accompanied at its very outset by severe cerebral affection and convulsions. Here bleeding may be employed, and if necessary, unhesitatingly repeated.' To support this view, Dr. Schneemann instances the authority of Armstrong, Bernd, Stieglitz, Hammond, Hingeston, &c. Venesection is, accordingly, the sheet anchor. 'Other remedies are—1. The application of concentrated cold to the head, and the best form for this is ice. The cold dash is often more hurtful than useful, on account of the serious reaction which follows it, and exposes the patient more to the dangers of an apoplectic attack, although its results for the minute are often very flattering. At the end of every two hours, the bladder of ice should be removed, in order that the uninterrupted effect of the cold may not weaken too much the tone of the vessels of the brain.'

* Here it will be as well to inform those who may be unacquainted with the fact, that in Germany a feather-bed is constantly substituted for bedclothes.
'Warm mustard plasters to the shins are a most valuable remedy.'

'Internal remedies are generally of very little use where the above-given remedies fail; the only one of any importance is the carbonate of ammonia. Mercury is of little value, except just to open the bowels; for its specification never comes into full play till the system is throwing off the affection. There are, however, much better purgatives than calomel; the saline, for instance. Emetics ought not to be tried in cases complicated with cerebral affection; in others they may. The aconite failed in the author's hands, both in tincture and solution.'

'With regard to the treatment by leeches and ammonia, so many writers have already pointed out its good results, that the author can safely recommend it, but with the proviso, that in urgent cases bleeding be substituted for leeches.'

§ 2. The Affection of the Throat. a. Primary.—'As this is but a link in the whole; so must the measures taken for its removal be such as will remedy the general affection.'

'b. Secondary.—For this, the rubbing-in, as it acts by prophylaxis, is the best possible remedy; but where this has not been brought into use, or where, from keeping the patient too warm, desquamation has come on, and the secondary sore-throat has set in, the best remedy is emetics; 'they not only remove the tough glazy slime, but excite the secretions and excretions to more equality and normal disposition, and this is especially the case if the disorder have a more gastric character.' (See Dewees, Pitschaft, Sundelin, Seifert, &c.) Many, by confounding the employment of emetics in the early and latter stages, have brought them into discredit. For the swelling of the tonsils an excellent remedy is, a solution of nitrate of silver, (twenty grains to an ounce of water:) with which they and the soft palate are to be painted; but so many varieties present themselves in these secondary attacks following on scarlet fever, that no general rules can be laid down. Here every thing depends on the discrimination and judgment of the practitioner.' 'Another proof how necessary it is at once to quell the disorder on the principles above laid down.'

Cases of Calculi in the Kidneys, with Observations. By Cathcart Lees, M. B., Physician to the Meath Hospital.—(Dublin Quarterly Journal.)

Although the present advanced state of pathology and chemistry has thrown much light on all the diseases of the kidneys, yet the practitioner must confess that he often feels embarrassed when called upon to decide as to the exact nature and cause of
some of the frequent, though often obscure and painful symptoms, referred to these organs. It is, for instance, difficult to pronounce whether a patient's sufferings are caused by mere functional derangement, or are owing to some acute or sub-acute inflammatory attack of the substance or lining membrane of the kidney, requiring antiphlogistic treatment, but not likely to return if properly treated; or whether they are caused by the presence of a calculus in the kidney, or some degeneration of its substance malignant or otherwise, when the treatment must be chiefly palliative, and our prognosis, to say the least, very guarded as to the probable return and final result of such attacks. I therefore think it may be interesting to the profession, to give the details of two cases of calculi in the kidneys, where the symptoms were accurately observed by me during life, and the diagnosis confirmed by post mortem examination.

J. B——, aged 20, apprentice to a watchmaker, a strong lad, but of a sallow, unhealthy appearance, had been under my care occasionally for about two years, suffering from frequent desire to pass urine, with pain in the loins, particularly in the right side, sensation of nausea, and general uneasiness, but never so as to incapacitate him from attending to his business. The urine was always passed pale, turbid, and alkaline, a thick ropy mucus coming with the first gush; specific gravity 1.006; albuminous, and contained very little urea. The quantity of urine was scanty, but the deposit of ropy mucus very considerable. He was examined by Sir Philip Crampton and Mr. Read, who pronounced that there was no disease of the bladder; the diagnosis was chronic suppuration of the kidney, with probably granular degeneration. His father told me that the lad had passed a small stone when he was about ten years old, but had the ropy mucus in the urine from infancy; and the same appearance had also been present in his mother's urine. He was relieved by treatment, but suffered from repeated returns of the complaint, till at last, after exposure to cold, he was attacked with severe pain across the loins, sickness of stomach, and great debility. I found him suffering from pyrosis, diarrhoea, dry parched tongue, constant nausea (no dysuria); pulse 100, very feeble and intermitting; countenance expressive of great suffering; the urine was pale, scanty, highly alkaline when passed; a copious deposit of ropy mucus, with a slight reddish tinge; there was great tenderness on pressure along both ureters. A consultation was held with Mr. Smyly, when we agreed that his sufferings were probably caused by a calculus impacted in the ureter. Two days afterwards, the abdomen being much retracted, I detected a hard tumour a little above the level of the umbilicus in the right
lumbar region, anteriorly. The tumour was hard, tender, and could be moved laterally; he suffered constantly from severe nausea and retching, like the worst form of sea-sickness, and died suddenly, while being turned in bed; but, strange to say he had not been confined to bed till within four or five days of his death.

The body was examined by Mr. Williams. Though it appeared greatly emaciated, there was a considerable amount of fat in the integuments of the abdomen. On putting aside the omentum and intestines, the tumor came into view, covered with fat, and lying close along the spine; it proved to be the right kidney, which was brought forward out of its proper place, and joined to the left kidney across the vertebral column, forming what is termed a horse-shoe kidney, the substance of one being continued into that of the other by a transverse portion passing across the spine. Both the sides and the transverse portion were filled with calculi. The pelvis of the right kidney was filled by a large calculus, which extended into the calices, forming branches, and which constituted the tumour felt during life; but both kidneys were quite filled with calculi, of various sizes. The tubular structure of the kidneys was nearly obliterated, and the cortical substance much congested; the ureters were pervious, and slightly dilated; the bladder was of the natural size; no thickening of its walls, nor any columnar fibres, which was satisfactory in confirming the opinion as to the healthy state of that viscus, which had been previously given. It presented, however, a curious appearance, the mucous membrane being covered over with numerous vesicles, which contained a gelatinous fluid. The other viscera of the abdomen appeared healthy, as also the viscera of the thorax. The calculi, when removed from the kidney, presented, over the most of their surface, a rough, white, granular appearance, covered here and there with patches of a dark brown colour, composed of oxalate of lime; the chief bulk of the calculi was, however, composed of triple phosphate with phosphate of lime; of these the latter was by much the more abundant, as was proved by dissolving out the triple phosphate by acetic acid, and by the calculus fusing only slowly and partially before the blowpipe. The phosphate of lime, almost all of which resisted the action of the acetic acid, was instantly and completely dissolved on the addition of dilute muriatic acid. One of the largest calculi weighed 1120 grains. I made sections of some of the calculi, but the composition was the same all through. He had never passed any sand in his urine, in which, when examined with the microscope, minute acicular prisms of the triple phosphate only were observed.
William Clarke, a car-driver, was admitted into the Meath Hospital for bronchitis. On going round the wards I observed this man vomiting, and on inquiring as to the cause, he said he vomited constantly, and attributed it to his cough. On investigating his case I found that he suffered from constant dull pain in the right lumbar region, with severe pains in his feet, and vomited every morning, but passed urine without any annoyance. He stated, however, that he was formerly a soldier, and that in Africa, twenty years ago, he contracted fever, and at that period suffered from some urinary affection, having occasional retention, with severe pain in the loins and region of the bladder. He was discharged and gradually recovering, continued in good health till about six years since, when he was attacked with severe pain in the lumbar and pubic regions, accompanied by obstinate vomiting, which persisted for three days, when, after violent straining, he passed a small stone by the urethra. The urgent symptoms immediately subsided, and he continued free from suffering till about three months since, when the symptoms of which he now complains made their appearance. The urine was now found to be large in quantity, of a pale opaline colour, alkaline immediately after being passed, spec. gravity 1-007, albuminous; a copious deposit of white sediment subsides to the bottom of the vessel, while an iridescent pellicle floats on the surface; on submitting the urine to microscopic examination, large triangular prisms of the triple phosphate were seen, with amorphous phosphate of lime. I made the diagnosis of a calculus in the right kidney, and put him on a generous diet, with dilute nitric acid, and mild counter-irritation to the right lumbar region, under which treatment he was progressing favourable, when unfortunately he was attacked with erysipelas of the face and fauces, which terminated in death. Both kidneys presented evidences of considerable congestion; in the right one, firmly imbedded in its substance, there was a calculus the size of a lozenge, elongated, curved at its extremity, and the whole cortical substance of the organ appeared to be undergoing the process of granular degeneration. The mucus membrane lining the pelvis of the kidney and commencement of the ureter was of a dull white colour, and slightly thickened.

These cases present many points of interest, some common to both, others peculiar to each. The appearance of both these patients was strikingly characteristic of what Dr. Prout has termed the phosphatic diathesis; they were both unhealthy-looking, as if labouring under some form of cachexia. The temper of the last patient, Clarke was peculiarly fretful, irritable, and morose; the nurse, and even the patients, com-
plained that nothing would please him; he was always grumbling. The most constant complaint in both cases was of pain in the back, and this is a symptom well worth investigating; as Sir Benjamin Brodie truly observes, "there is nothing in practice which you will be so often consulted about as pain in the loins." The gouty debauchee, the married female, the hysterical girl, the athletic man, the victim of lumbago, all complain loudly of pain in the back, although there may not be the slightest organic change in the kidneys. Again, pain in the back is a prominent symptom in aneurism of the abdominal aorta, also in rheumatic inflammation of the intervertebral cartilages and vertebræ; and such is the difficulty, in some cases, of forming a correct diagnosis, that Sir B. Brodie with great candour mentions a case which he and Dr. Prout diagnosed and treated as calculus, which ultimately proved to be caries of the vertebræ; so that we should be slow in concluding that there is disease of the kidney because there is constant pain of the back, unless we have other symptoms to guide us, as in these cases, where we had a very important additional symptom, viz., nausea and vomiting, particularly well marked in Clarke's case, and which was caused, I feel confident, by the mechanical irritation of the tubular structure of the kidney by the phospathic crystals; and in this irritation the stomach participated, through the influence of the splanchnic nerves, from which both the renal and gastric plexuses are derived. This symptom is also of great use in aiding us to distinguish the symptoms and signs caused by the presence of a calculus from the effects of a simple chronic nephritis. Here also there is languor, a cachectic appearance, pain in the loins; the urine pale-coloured, alkaline, phosphatic, occasionally albuminous, but without vomiting, so that the mere secretion of alkaline urine is not sufficient to cause vomiting. It is of great importance in all these cases to ascertain whether the urine is secreted alkaline, or whether it has become so in consequence of chemical changes taking place in it after its secretion. This distinction has been particularly insisted on by Rayer, who considers that urine which is secreted alkaline is an important indication of simple chronic nephritis, and particularly so as there is often no other very obvious sign of the disease. The inflammation runs a very insidious course; they complain of some languor, look out of health, may or may not have some aching about the loins. The bronchitis which Clarke complained of on admission I regard also as another of those sympathetic irritations, intimately connected with the morbid state of the nervous system; for there was no proportion between the apparent suffering caused by the bronchitis and the
physical signs on auscultation, the former being excessive, the latter trivial; nor did the symptoms yield to the usual treatment with the facility we would expect in a case of simple bronchitis.

The physical and chemical characters of the urine were highly important, as in both cases, it was very pale in colour, alkaline, albuminous, and loaded with phosphates, affording a good example of the co-existence of those deranged actions by the influence of which the phosphates are deposited and albumen appears as a morbid product in the urinary secretion, and exhibits one of the numerous complications which may accompany albuminous action. This coincidence involved some nicety in the examination of the urine; for as the fluid was alkaline, it was not coagulated by heat, which merely rendered it turbid by causing a deposition of the phosphates, so that I had first to dissolve them in acetic acid, which has no effect on albumen, and then I coagulated the albumen with dilute nitric acid, thus proving the existence of both abnormal elements in the urine. Another important feature in the urine, was the nature of the deposit; in the first case it consisted of a dense, ropy mucus, as was proved by Mr. Moore, to whose valuable assistance in the chemical and microscopic examination of urine, on this as well as on other occasions, I feel much indebted, who found the addition of acetic acid to corrugate it, and form a peculiar brainlike substance. This ropy mucus always came out with the first gush of urine. Now these points are of importance to bear in mind, as it is laid down in many books as a means of diagnosis between disease of the kidney and that of the bladder, "that in chronic inflammation of the pelvis, and calices of the kidneys, there is dysuria, with a deposit of true pus which flows after the urine; while, in catarrh of the bladder, the deposit is glairy and viscous, consisting of ropy mucus," but in this case the deposit was ascertained (by Mr. Moore) to be mucus, not pus, and the chief part of it came out before the gush of urine, as I had frequently asked the patient about it, and he told me it always preceded it; but we should bear in mind, that a glairy appearance may be caused in renal pus by the presence of a certain amount of alkali in the urine; and I believe, as a general rule, whether pus or mucus comes from the kidneys, ureter, or bladder, it is always passed mixed with it, though in greater quantity, towards the end of the emission. The urine in the second case, that of Clarke, was also peculiar in depositing a copious sediment, though of a very different nature, as in his urine there was no mucus, but a copious deposit of earthy and alkaline phosphates, forming a thick stratum like white gravel at the bottom of
the vessel. Now this is a rare circumstance when the urine is pale, abundant, and of low, specific gravity, for though this condition of the urine is generally considered to be characteristic of what is termed the phosphatic diathesis, and to consist in an excess of phosphates, yet it really is not the case. This has been satisfactorily proved by the experiments of Dr. Aldridge, detailed in the "Dublin Journal of Medical science" for March, 1843. He states "that in place of being increased, the quantity of phosphates in the urine is actually generally diminished in the so-called phosphatic diathesis;" and Rayer, in his valuable work on diseases of the kidney, dwells particularly on this state of the urine, as strongly indicative of a chronic inflammation, or a subacute nephritis; in fact, the term "phosphatic diathesis" does not necessarily imply any actual excess of phosphates in the urine, while it recognises their appearance as a deposit, determined by a deficiency of acid, or by alkalencescence of that fluid. Earthy phosphates are very insoluble in alkaline fluids, and very soluble in dilute acids, so that the slightest trace will be made visible if the urine becomes alkaline, and a great excess will be concealed if the urine is normally acid; so that, as has been well proved by Dr. Bence Jones, their non-appearance does not argue their absence, nor their appearance their presence in excess. In fact, though variations in the acidity and alkalencescence of the urine are common, yet an excess of the phosphates is very rare. It may appear strange that some of the symptoms generally considered pathognomonic of calculi in the kidneys were absent, such as pain shooting down the course of the ureters, retraction of the testes, bloody urine; but I presume that the calculus not having entered the ureter sufficiently accounts for the absence of pain in this direction, and the nature of the calculi being phosphatic and free from asperities accounts for the absence of hæmaturia. It is indeed surprising to what a size phosphatic calculi may form in the kidney without the occurrence of hæmorrhage, or even any serious symptomatic irritation, as long as they remain confined to the gland. If they are too large to pass into the ureter, they generally cause some disturbance, but not at all proportionate to their size, as, their increase being generally very slow, the organs gradually become accustomed to the stimulus, and accommodate themselves to the pressure, till the organization and consequently the functions of the kidney are destroyed; but if the calculus be dislodged or fractured, as in the case of a fall, or strain of the lumbar muscles, they are attacked with severe pain in the back; vomiting, often inflammation of the kidneys, and suppression of urine, followed by coma and death, or sup-
puration of the kidney may take place; or they may escape with merely an attack of violent pain, as occurred in a case which Dr. Edwards Crisp has given me the particulars of. A gentleman, sixty years of age, when jumping over a flower bed in his garden, was seized with a sudden and violent pain in his right loin, which continued for several hours, but gradually subsided. He died about twelve months after, of disease of his heart, and in the pelvis of the right kidney a large calculus was found, which was fractured in the middle. The malformation of the kidneys in the first case, with their anomalous position lying across the vertebrae, ought not to be considered as a mere anatomical curiosity, for it might occasion a serious error in diagnosis, either by causing the displaced kidney to be mistaken for some morbid tumour in the abdomen, or might divert our attention from the true source of the disease, in cases where the symptoms should lead us to suspect a disease of the kidneys; thus Rayer, in his valuable work*

* gives the particulars of a case of inflamed horse-shoe kidney, which lay across the spine. The patient complained of severe pain in the umbilical region, but none in the lumbar; the disease of the kidney was not suspected, though the urine was purulent. In my case the malformation proved of assistance in making the diagnosis, as, from the kidneys being brought forward in front of the spine, I was thus enabled to detect the calculus. I am not aware of any other case in which a calculus has been detected by feeling it through the abdominal parietes anteriorly.

As for the treatment in these cases, acids appear to be chiefly indicated,—rather as general tonics in improving digestion, than with the hope of rendering the urine acid,—together with good animal diet, cider, and Rhenish wines. I generally prefer the dilute nitric acid, as it agrees well with the stomach. When the secretion of ropy mucus, or muco-purulent deposit, is very great, I have found benefit from the balsam of Tolu, alternately with preparations of Buchu. Pareira brava, bark in effervescence, turpentine, cubebs, copaiba, are recommended, but great caution should be observed in their use, lest they induce severe inflammatory action for though the secretion of mucus, or muco-pus may be diminished by their use, yet the paroxysms of pain are often increased. Opium, camphor, and hyoscyamus, are valuable auxiliaries, with mild counter-irritation, and belladonna to the loins. Our treatment should be palliative and preventive; and I cannot conclude this paper better than by referring to the latest opinion† of Rayer on this

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subject, though I think he overrates the frequency of inflammation of the kidneys as the cause of alkaline urine, and undervalues the use of acids.

Unless the examiner is well versed in the microscopic investigation of urine, he will sometimes find it difficult to form a correct diagnosis, particularly in the case of phosphates, for when they occur as minute acicular prisms, they are often crystallized like uric acid on one of the fine transparent hairs which are found in urine, and the irritation and excitement of a calculus often causes the urine to be loaded with lithate of ammonia; but the history of the case, the absence of bloody urine, and the invariably colourless crystals of the phosphatic magnesian salt, will be sufficient to prevent his making an error.

BIBLIOGRAPHICAL NOTICES.


It can scarcely be necessary to express an opinion upon the merits of a work which has become generally known to the profession, and is so universally approved as to have reached a third edition. Our principal object in noticing this new edition of Dr. Condie’s work is to call attention to the fact, that it is much improved, not only by the addition of a full and well digested article on epidemic Meningitis, but by the introduction of all the more important discoveries and improvements which have been made in the nature, diagnosis, and treatment of the diseases of children. The work is what it professes to be, a practical treatise, and no one can fail to be benefitted by its perusal. After having named Messrs. Lea and Blanchard as the publishers of Dr. Condie’s book, any commendation of its mechanical execution will be unnecessary.


This work was written by Dr. Churchill, for the American press, at the request of his American publishers, and is now for the first time presented to the profession.

The high reputation Dr. Churchill has acquired in Europe and the
United States, by his work on Obstetrics and the Diseases of Women, cannot fail to secure a favorable reception for the one now before us.

We were very much gratified at the appearance of this publication, but still more on examining its valuable contents. In our estimate, some little modification may be required in the treatment of certain diseases, especially in the doses of certain medicines; but with occasional variations and adaptations to Southern practice, which any physician of even moderate experience can readily make, its claims to merit, both as a scientific and practical work, are of the highest order.

Whilst we would not elevate it above every other treatise on the same subject, we certainly believe very few are equal to it, and none superior.

J. A. E.


The Physiological works of Dr. Wm. B. Carpenter are so extensively and favorably known, that the mere announcement of a new edition of his most complete production, "with extensive additions and improvements by the author," is sufficient to secure for it a ready sale. The career of Dr. C. as an author has been most brilliant, both in Europe and in the United States. From the fact, however, that the demand for a new issue in this country has anticipated that in England, the author has had the opportunity of laying before his American readers his latest views upon several topics of considerable and growing interest, especially on the Nervous system and on Generation. The treatise before us may therefore be now regarded as one of the most complete we have, and should be possessed by all who desire to keep pace with the rapid strides of this very interesting department of medical knowledge, a correct acquaintance with which is indispensable in the appreciation of the morbid as well as normal phenomena of life.

D.


We have just received the first part of this beautiful work, containing sixteen plates representing dissections of the Thoracic, Cervical, Axillary, Brachial, and anti-Brachial regions. The representations appear to have been made from original dissections, and are remarkably clear, and beautifully colored.
Although we are not prepared to admit that any thing can supply to the operator the place of actual dissections—for it is only by this means that we acquire such a definite idea of the conditions and relations of parts as will give confidence to our incisions—still, to those who have dissected, this work will be found a most valuable remembrancer of knowledge more thoroughly and laboriously acquired in the dissecting room. The plates are accompanied by references and explanations, and when the whole has been published, it will be a complete and beautiful system of Surgical Anatomy, having an advantage which is important, and not possessed by colored plates generally, viz: its cheapness, which places it within the reach of every one who may feel disposed to possess the work. Every practitioner, we think, should have a work of this kind within reach, as there are many operations requiring immediate performance in which a book of reference will prove most valuable.

H. F. C.


We have examined this excellent work with much satisfaction. It is a concise and systematic treatise on the diseases of the Bones; and supplies a want in medical literature that has been much felt by the profession. Heretofore we have been wholly dependant upon the few pages in works on Pathology and Surgery, for the history of the obscure, and often inscrutable diseases of this important part of our organism; hence, the student's information concerning them is generally imperfect, for want of more definite and elaborate treatises. The only works now extant that are devoted entirely to the diseases of the bones, are the Treatises of Petit, published in 1705, and of Boyer, in 1803. These are not accessible to the whole of the profession; and moreover are not of sufficiently modern date for the present state of our science. The present work seems to be the result of much study and patient investigation, under circumstances the most favorable for affording the best practical deductions. The author, from his position as Surgeon to St. Bartholomew's Hospital, has been enabled to produce a work of practical, as well as scientific excellence, and each of his chapters is well sustained and illustrated by cases which much enhance the value of his teachings.

The work deserves a more extended notice than the limits of a monthly journal permits; we therefore must content ourselves with giving it our unqualified recommendation. H. F. C.
PART III.
Monthly Periscope.

On the Depurative Action of the Bile. By Dr. Fauconneau-Dufresne. (Brit. and For. Med. Rev. N. Y. Journ. Med.)—Speaking of the function of the liver as auxiliary and vicarious to that of the lungs, the author observes:—In intra-uterine life, the bile, in the absence of respiration, purifies the blood by the removal of carbon. The meconium of the foetus is the carbon of the blood, extracted in a liquid form, which after birth will be eliminated in the gaseous form. If it is objected that the biliary secretion in the foetus is not manifested until towards the fourth month, it may be answered that, until this period, the liver is of very considerable proportionate size, and that it retains, for the purpose of its augmentation, materials, which, later, will serve for the secretion of this fluid. This function of the bile is not so applicable in extra-uterine life. In the different vertebrata, the development of the liver is generally found to be inversely to that of the lungs. This remarkable antagonism exists especially in fish, which respire by the bronchiae. In certain species of serpents the bile is very abundant, as if to compensate for their imperfect respiration.

MM. Sandras and Bouchardat (Annuaire de Thérapeute. 1845,) have established that, whatever be the nature of the aliment taken by an animal in good health, the quantity of fatty matters found in the blood is nearly the same, which gives rise to the supposition that they are eliminated as fast as they are introduced into it. According to the same authors, the fatty bodies which the liver separates from the blood have a constant point of fusion, and consist principally of cholesterine, which the blood of carnivora always contains, and of the margaric and oleic acids, united with soda. The fatty bodies of the blood are subjected to a series of successive oxidations, by which the solubility of the soidic compound which they form, is indefinitely increased. Cholesterine may result from the alteration of the fatty bodies; for it is a neutral fat, the point of fusion of which is very high, and which, not having been burned in the blood, must necessarily become eliminated from the economy.

Arsenic in Intermittent Fever. (Journ. des Con. Med. Chirurg.)—From the first of January, 1843, to the first of January, 1846, five hundred and seventy-four persons were admitted into the military hospital of Versailles with intermittent fever. Of this number, one hundred and forty-two had but slight fevers, and as their general health was not sensibly affected, they were treated with emetics, and simple hygienic means. The other cases in which the fever was well marked, and originated in marshy localities, were treated with the sulphate of quinine, or arsenious acid and emetics. Of the cases treated without either quinine or arsenic, there were eight relapses. One hundred
and eleven cases treated with the sulphate of quinine furnished fourteen relapses, whilst of three hundred and eleven treated with the arsenic, there were but ten. More than one-third of the cases submitted to the arsenical treatment, had previously taken the quinine. The sojourn in the hospital of those who were treated with quinine averaged thirty days; those who took arsenic averaged but twenty-two days.

It is very evident that the intermittents of France are more obstinate than those of our region, or that our French brethren have yet much to learn in relation to the mode of employing quinine in such diseases. We hazard nothing in asserting that in the hands of the most inefficient of our practitioners, nay, even under the management of southern overseers, it would be a rare occurrence for any patient laboring under intermittent fever to remain on the sick list for one half of either of these average periods.

_Friction of Oil of Turpentine in Intermittent Fever._ (Journ. des Con. Med. Chir.)—M. Maillier states that, since the year 1846, he has employed frictions with oil of turpentine with uniform success in cases of intermittent fever, even in such as had resisted the action of quinine in very large doses. He uses a liniment composed of the oil of turpentine, to which is added a small portion of laudanum, of which a couple of spoonsful are rubbed along night and morning during the apyrexia.

_Nitrate of Silver in Cholera._ (Bulletin Gén. de Thérap.) By N. Barth.—The nitrate of silver was administered to fifty-three patients of all ages, and all more or less seriously attacked. To some, it was administered only in enema, but in most instances it was also taken by the mouth. The ordinary dose was one grain, and in enema, five grains, and was administered one, two, or three successive days, rarely longer. In many cases the desired effect was produced in twenty-four hours; when employed for three or four days, without any good result, its use was abandoned. The principal effect of the nitrate of silver was to moderate the morbid secretions, and frequently in eight or ten hours, the diarrhoea was arrested. In many cases the obstinate vomiting suddenly ceased after the first doses of the medicine had been taken. In no instance did the nitrate produce any inconvenience. In several instances, it produced no astringent effect, especially when given too late, but it never caused pain in the bowels or stomach, or was followed by any unpleasant consequences.
Combination of Mercurials and Chalybeates in the treatment of Secondary Syphilis. (Journ. des Con. Med. Chir.)—Secondary Syphilis is often accompanied with a discoloration of the tissues with anemic symptoms, against which it has been remarked that preparations of iron were very often efficient remedies, after the use of mercurials.

The following is a formula for making Mercurial Ferruginous Pills, in imitation of those of M. Lagneau, which M. Bouchardat recommends to the employment of practitioners.

R. Double Mercurial Oint., Vallet’s Pill mass, aa. 5 grammes.
Medicated Soap, Make 100 pills. Dose, from 2 to 6 per day, to be continued for the space of two months.

Aloetic Febrifuge Elixir. (Journ. des Con. Med. Chir.)—A Journal attributes to M. Recamier the following formula for avoiding the unpleasant consequences in the administration of Sulphate of Quinine:

R. Aloes, soc. in powder, Myrrh, aa. 6 grammes.
Rheii, 150 "
Alcohol, at 32° 20 "
Macerate for 24 hours, and filter. In this liquid, dissolve 6 grammes of sulphate quinine, agitate the whole with 25 or 30 drops sulph. acid, and add 2 grammes of Sydenham’s laudanum. Dose, for an adult, 1 table-spoonful, and for a child, about a desert-spoonful. After each dose, the patient should keep warm, and remain at least two hours without drinking. By adding to this elixir 4 grammes of pulv. colchici, it becomes, according to M. Recamier, a good remedy in rhematic affections.

On the Nutritive Properties of Fish Oil. By Robert Druitt, F. R. C. S.—(Med. Gaz. N. Y. Jour. Med.)—Of the virtues of cod liver oil there can be now no question;—and it seems capable of doing two things. In the first place it fattens and adds to the bulk of the body; and, in the second place, it gives nutrition a better turn, as it were; it makes the fluids and solids healthier as well as bulkier, and enables them to throw off a variety of cachectic derangements. These useful qualities have been partially accounted for on the supposition that they are due to a minute quantity of some biliary principal contained in the oil. This supposition seemed to me extremely improbable, especially on considering the numerous adulterations to which the oil was liable; and accordingly I determined on making a few experiments on the subject, the results of which I beg to forward to you.
For this purpose I applied to my oilman for some specimens of the purest and sweetest lamp oil, and procured several varieties of whale and seal oil, decidedly fishy and rank in flavor, but not rancid or oxidized or putrescent. In fact, the flavor of the oil commonly called "southern oil," the produce of the black whale, which I chiefly employed, is not disagreeable to any one who is free from fancies on the subject; and if mixed with three or four parts of almond oil, is not a whit more offensive to the taste than the common oleum jecoris asselli.

Case I. and II.—Two brothers, S., aged 3 and 5, flabby, pasty children, each suffering from pustular eruption on the head and face. A wound made on the head of one of them a week since had degenerated into a flabby sore. No deficiency of food. Both took a teaspoonful of seal oil three times a day in lemonade. Their mother reports that they were excessively fond of their medicine; they took it for a fortnight, when the skin of each was quite healthy, and complexion clear.

III.—J. W., a pale, unhealthy child, aged 2½ years, subject to pustular eruptions on the face. Cured by the same dose of southern oil, thrice daily for a week. Cured far more readily than on former occasions by calomel. Likes the oil extremely.

IV.—J. L., a miserable child; glands in neck, greatly enlarged; purulent discharge from ears; abdomen swelled and hard. This child got better under the use of seal oil, but did not take it regularly enough to make the case of any value.

V.—J. E., aged 2, subject to skin disease from birth; his mother has had syphilis: his complexion peculiarly pasty and sallow. Took southern oil in the above doses for a month. Greatly improved in flesh and complexion; but at the end of the course had an attack of eczema in the arms.

VI.—W. æt. 30; subject to sciatica. Took the southern oil; is certain that it has done him much good.

VII.—J. W., æt. 36. Was largely bled for acute rheumatism a twelvemonth since. Has never recovered flesh or strength, and is racked with pains in the back and shoulders. Took cod liver oil for a month with benefit last May; left it off during the summer; became thinner and weaker. Took southern oil in the dose of two drachms thrice daily for three weeks; likes it much; feels stronger, and looks as decidedly fatter and better in condition as he did from the cod liver oil.

Mrs. P., suffered from puerperal mania whilst suckling last autumn; has continued anaemic and despondent; has taken every form of mineral and vegetable tonic with temporary benefit. Took southern oil for three weeks, is unmistakably plumper, clearer in complexion, and in better spirits.

IX.—J. M., a sallow child, æt. 4, took the southern oil for a week, for impetiginous eruptions on the face and legs. The improvement in flesh and clearness of complexion was extraordinary, and the eruption nearly disappeared.
These few cases do not prove much: but, so far as they go, are satisfactory. No one who had seen the children above mentioned before and after their course of oil, could doubt that a most beneficial change had been wrought by something. The great delight which the little wretches took in their dose is another point worth noticing. I would therefore suggest, that it is well worth while to make a fair experiment on a large scale, to determine whether it is fish oil in general that does good, or only the oil of the cod’s liver. If, as I believe, almost any kind of fish oil will answer the purpose, then many of the poor will be able to use the cheaper kinds, who could not afford the nicer but more costly cod liver oil.

Remarks on the good effects of the ointment of Nitrate of Silver, in the treatment of venereal buboes. By Dr. Robin, Sainte-Etienne, Loire. (Bul. Gén. de Thérap.)—Encouraged by the success of Dr. Lutens (of Anvers) in the treatment of venereal buboes, by nitrate of silver, I had recourse to its employment in my venereal practice, at the hospital of Sainte-Etienne, and employed it in more than twenty cases of double adenitis, and at all stages of inflammation.

These are the results: In twelve cases the inguinal engorgement disappeared in eight or ten days, using the ointment morning and night; in the remaining four, it was necessary to continue the frictions for a few days longer.

In four cases I punctured the tumor, to allow the pus, which had collected, to escape, and to prevent a too great destruction of skin. Friction was continued on the remaining portions of the tumor, and a cure was quickly effected.

The stage of suppuration was so far advanced in two other cases, at their entrance into the hospital, that I was obliged to confine myself to the knife and emollients.

Such results should encourage practitioners in the use of this ointment in the treatment of syphilitic buboes, and in analogous cases. There is no doubt, but that indurated orchitis, bronchocele, parotitis, &c., might be successfully treated in this manner.

This ointment does not occasion pustular eruptions, as mercurial, and other ointments do, but only an itching. The nitrate of silver should be first dissolved in a very small quantity of water, before mixing it with the adeps.

The ointment used by Dr. Lutens consists of 4 gram. of the salt to 30 gram. of adeps, but that used by myself contained but 2 gram. of the salt, and the results were so satisfactory, that I deemed it unnecessary to increase the strength.
New mode of Tamponning the Nasal Canals. By M. MERAT.
the nasal cavities, they are found to be narrow, crooked canals, nar-
rower behind than in front, and lined by a highly sensible mucous
membrane. We know that the most frequent seat of nasal hemor-
rhage is at the anterior and superior part of the canal. In considera-
tion of this anatomical and pathological circumstance, and also the
difficulty of the ordinary mode of operating, M. Merat thought that a
more certain method might be adopted, which would also be less com-
plicated and easier of performance, for arresting the hemorrhage.
This consists in introducing, through the anterior opening of the nostril
only, small balls of lint, pushing them back as far as possible, there
being no danger of forcing through the posterior opening, since the
canal diminishes as it proceeds backward, and the efforts at expecto-
ration and coughing will tend to keep them forward.
This method has, according to M. Merat, the advantage of being
within the reach of every one, for cotton, paper, &c., may be substi-
tuted for lint.
This mode produces but little pain compared to Bellocq’s, and it
does not produce tumefaction and that fetid secretion from the mucous
membrane, which the last named method sometimes does. And an-
other advantage which M. Merat ascribes to it is, that it can be used
immediately.

Conclusions respecting Laryngotomy in Croup. By F. CHURCHILL,
M. D.—1. That the larynx is not mechanically closed by false mem-
brane; that in all cases, as Dr. Cheyne has remarked, there is suffi-
cient space for the access of air; that if the larynx be closed, it must
be by spasm in addition to the exudation; and that, therefore, to at-
tempt relief by a mechanical operation would be superfluous, to say
the least of it.
2. That it is extremely difficult to say that exudation has taken
place, and still more to fix the limits of it, and pronounce in any case
that it has not extended below the larynx; and yet upon this depends
the utility of the operation; for—
3. If the false membranes have extended below our incision, the
operation, being purely mechanical, can afford no relief, but may se-
riously add to the danger.
4. Bronchitis or pneumonia may exist at the time of the operation,
or may very likely arise very soon after, and render it altogether use-
less.
5. The operation itself is not without danger, nor quite so easy as
has been stated, especially with young infants. In addition to hemor-
rhage and escape of blood into the trachea, the patient may be at-
tacked by prolonged syncope, asphyxia or convulsions, as occurred in M. Trousseau's practice, and occasionally either of them may prove fatal.

6. That the risk of inflammation and other accidents after the operation is very considerable, and materially diminishes its value.

7. That the results of the operation hitherto, although successful to a considerable extent, are not sufficient to justify our having recourse to it under ordinary circumstances. "If," says Mr. Porter, "it were possible to place a host of those cases in which bronchotomy had not proved serviceable, in array against those wherein it had seemed to be useful, it would scarcely be necessary to advance any further argument in proof of its uncertainty."—*On Dis. of Inf. and Childhood.*

**Reciprocal Influence of Pregnancy and Phthisis.** (Journ. des Con. Med. Chirurg.)—The influence which pregnancy and phthisis exert reciprocally upon each other. In a memoir read by M. Grisolle, under this head, he states as his opinion that pregnancy does not arrest the progress of phthisis, as it is supposed, but on the contrary it rather increases the organic lesion. Here are the results of his observations in seventeen cases.

1. It is rare to see conception take place in confirmed phthisis; but, on the contrary, the first symptoms of pulmonary tubercles often appear suddenly during pregnancy, and particularly during the first three or four months.

2. If unfavorable hygienic conditions, grief and misery, seem sometimes to explain the development of the organic affection, it is certain that in the greater number of instances pregnancy was the only observable change in the condition of the woman, and that it acted as the exciting cause. But pregnancy did not produce the disease; it only predisposed to it, as any other physiological or pathological change would have done.

3. Pregnancy and phthisis appearing at or about the same time, ran their course without seeming to influence each other.

4. I have however observed, by comparison, that the organic lesion ran its course more rapidly than when pregnancy did not exist.

5. What proves, moreover, the evil effects of pregnancy, is that, as soon as parturition takes place the disease relents in its progress, or remains stationary, provided the disease was not too far advanced before delivery.

6. Pulmonary tubercles do not modify pregnancy, at least in the majority of cases. This point has already been established by Désormeaux and M. P. Dnbois.
Suppression of Uterine Hemorrhage. Machen. (Lancet.)—More than three years ago, I wrote to a medical publication, suggesting an apparatus somewhat similar, but, I think, more applicable to those distressing cases—hemorrhage after labour; indeed, its simplicity is such, that an ordinary midwife could with ease make use of it; for the greatest number of deaths occur in the practice of that class of obstetricians.

Having provided a bullock's bladder of the largest size, and an ordinary enema apparatus, I fix the neck of the bladder to the enema-tube, softening it, however, before use, in warm water. The bladder is introduced into the uterus, and cold water pumped into it. The direct application of cold will soon cause the open orifices of the bleeding vessels to close, and the uterus to contract; and that the water might escape as the uterus contracts, I would have the tube double, and furnished with a stop-cock, which could be open to suffer the water already pumped in to run out, while the pump might continue throwing in fresh cold water until the desired effect is fully obtained.

Craniotomy; the Child Born Alive. (Medical News.)—We copy the following extraordinary case from the Prov. Medical and Surgical Journal:

"A remarkable case is narrated in the annals of the Medical Society of Flanders, in which craniotomy was performed in consequence of deformed pelvis; but the child could not be extracted. As a last resource, the Cæsarean section was performed, and, to the astonishment as well as horror of the surgeon, the infant was extracted alive, and exhibiting an immense lacerated wound of the skull. The brain was completely denuded, and appeared to be reduced to a complete pulp. The child survived, and suppuration was established, large quantities of brain coming away at intervals with the purulent matter. When exhibited to the Society, the child (a boy) was nine years old, and did not appear intellectually inferior to the average of boys of his age. The mother did well, and died some years afterwards of fever."

Dysmenorrhæa. (American Journal.)—Dr. N. Ward, of Burlington, Vermont, reports that in several cases of menstruation, he has obtained the best results from the use of \( \frac{1}{4} \) gr. of sulph. ferri, with a slightly laxative dose of sulph. magnesia, every day during the interval of the monthly periods, or for the last ten days of the interval.
Medical Miscellany.

We have received a communication from Dr. J. D. Brooks, of Bellevue, Georgia, in reference to a singular epidemic which occurred in his neighborhood in August last, and to which the people assigned the name of "Bellows," the principal symptom being great difficulty of breathing, without cough or other indication of inflammation of the respiratory organs. The cases generally yielded in a day or two to an emetic, a mercurial cathartic, and sinapisms to the breast and spine. It is to be regretted that no post-mortem examination was made, by which more light might have been elicited in relation to the real pathology of these cases.

Creosote to remove the Taste of Cod-liver Oil. (N. Y. Jour. Med.) One drop of Creosote added to each dose of half an ounce of Cod-liver oil, is said, by Dr. Barclay, to succeed in almost every instance in obviating the sickness which so generally follows the administration of this oil.

Danger of using Gutta Percha Catheters. (London Med. Gaz.)—Caesar Hawkins, Esq., Surgeon to St. George's hospital, says:

Very soon after they were introduced, I was obliged to give up the use of catheters and bougies made of gutta percha, on account of the great irritation they generally excited in the urethra—an irritation which is also found in many cases to prevent the employment of splints made of this substance in the treatment of fractures and diseased joints, for which it would otherwise be well adapted. The case of a man who this day leaves the hospital, induces me to point out the actual danger to life which may be occasioned by catheters of gutta percha, and is the necessary result of the mode in which they are constructed; not of accidents or carelessness, which will occasionally lead to the breaking of the ordinary gum catheter also.

The catheter is made, it would appear, of a slip of gutta percha nearly an inch wide, and of the necessary length for making the catheter, which is twisted round a stilette, so as to make the edges of the slip join together, in which position a moderate degree of heat makes them cohere to constitute a tube, when the stilette is withdrawn. Of course, if this slip is screwed up in one direction, the edges are pressed together; but when twisted in the contrary direction, unless made to cohere very firmly, the catheter is readily untwisted into the original long narrow slip of the material employed, and probably the warmth of the body facilitates this separation of the edges of the slip. A second catheter, which my patient used on only one occasion, was thus opened at one point of junction, and was easily unrolled for its whole length; others are not so easily broken up, but all must be dangerous.
**Death by Chloroform.**—The January number of the London Lancet contains the history of a case in which the inhalation of not more than one dracbm of chloroform was followed by fatal consequences, in six or seven minutes. The case was one of a trifling character (onychia of the left great toe), and affords another striking illustration of the impropriety of resorting to so powerful an agent, except in the more serious surgical and obstetrical operations.

**Frequency of Poisoning by Arsenic.** (London Lancet.)—From the following table, drawn up by Messrs. Chevallier and BoysdeLoury, the relative frequency of the use of arsenic (arsenious acid) for criminal purposes in France will be seen at one glance.

| Arsenious Acid  | - | - | 34 | Tartar Emetic, | - | - | 1 |
| Acetate of Copper | - | - | 7 | Opium, | - | - | 1 |
| Cantharides, | - | - | 5 | Acetate of Lead, | - | - | 1 |
| Corrosive Sublimate, | - | - | 5 | Cerussa, | - | - | 1 |
| Nux Vomica, | - | - | 4 | Sulphuric Acid, | - | - | 1 |
| Fly Powder, | - | - | 3 | Sulphate of Zinc, | - | - | 1 |
| Nitric Acid, | - | - | 2 | Mercurial Ointment, | - | - | 1 |
| Sulphur of Arsenic, | - | - | 1 | Undetermined nature of Poison, | - | - | 1 |

**Important discovery in Ventilation.** (Lit. Gaz. London Lancet.)—Dr. Chowne has enrolled a patent for improvements in Ventilating rooms and apartments, of the perfect efficacy of which, we believe, there cannot be a doubt, and on a principle at once most simple and unexpected. Without going into details at present, we may state that the improvements are based upon an action in the inverted syphon which had not previously attracted the notice of any experimenter—viz., that if fixed with legs of unequal length, the air rushes down into the shorter leg, and circulates up, and discharges itself from the longer leg. It is easy to see how readily this can be applied to any chamber, in order to purify its atmosphere. Let the orifice of the shorter leg be disposed where it can receive the current, and lead it into the chimney (in mines, into the shaft,) so as to convert that chimney or shaft into the longer leg, and you have at once the circulation complete. A similar air syphon can be employed in ships, and the lowest holds, where disease is generated in the close berths of the crowded seamen, be rendered as fresh as the upper decks. The curiosity of this discovery is, that air in a syphon reverses the action of water, or other liquid, which enters and descends or moves down in the longer leg, and rises up in the shorter leg! This is now a demonstrable fact; but how is the principle to be accounted for? It puzzles our philosophy. That air in the bent tube is not to the surrounding atmosphere as water, or any heavier body, is evident; and it must be from this relation that the updraft in the longer is caused, and the constant circulation and withdrawal of polluted gases carried
on. But be this as it may, one thing is certain—that a more useful and important discovery has never been made for the comfort and health of civilized man. We see no end to its application. There is not a sanitary measure suggested to which it may not form a most beneficial adjunct. There is not a hovel, a cellar, a crypt, or a black, close hole anywhere, that it may not cleanse and disinfect. We trust that no time will be lost in bringing it to the public test on a large scale, and we foresee no impediment to its being immediately and universally adopted for the public weal. We ought to remark that fires or heating apparatus are not at all necessary; and that, as the specification expresses it, ‘this action is not prevented by making the shorter leg hot while the longer leg remains cold, and no artificial heat is necessary to the longer leg of the air-syphon to cause this action to take place.’

_Medical Education in Spain._ (London Lancet.)—We learn from an official return, that there are in Spain 290 professors belonging to the universities. Out of these, 86 give lectures on medicine and pharmacy. The number of medical professors is 75. There are, namely, 19 in Madrid, 14 in Barcelona, 14 at Valencia, 13 at Santiago, and 15 in Sevile. Of the 11 pharmaceutical professors, there are 6 in Madrid, and 4 in Barcelona. The 290 professors of the various universities of Spain cost the government 4,860,000 reals (£52,488.) The medical professors have salaries varying from £130 to £220 a year, and the whole of the medical and pharmaceutical professors, taken together, cost the state about £17,971. A glance at the profession in actual practice, shows that there are in Spain 5500 physicians and medico-surgeons, more than 7000 surgeons and 3300 pharmacons. It will therefore not appear surprising that the majority of practitioners are in great distress.

_Mortality in Cities._—The deaths in the city of New-York during the year 1849, amounted to 22,374, or 1 in 20.11, estimating the population at 450,000. Of this number 3718 died of consumption, and 5072 of cholera. If the deaths from cholera are deducted, the mortality from other diseases would be in the proportion of 1 in 26.

The deaths in Boston in 1849, are stated by the Boston Medical Journal at about 5300. The editor estimates the population at 130,000, which fixes the rate of mortality at 1 in 24.53.

The deaths in Augusta, during the same period, amounted to 215, of which 107 were whites, and 108 blacks. If we estimate the population at 9000, which is certainly under the mark, the ratio of deaths is 1 in 41.86. Of these deaths, 55 were from cholera infantum, and other diseases of the bowels.
AUGUSTA, JANUARY 2, 1850.

At a meeting of the Students of the Medical College of Georgia, Messrs. George Lumpkin, A. C. Hanson and W. S. Harden, were appointed a Committee to report resolutions expressive of their regret at the decease of their friend and fellow student, CHARLES C. C. WILLIAMS, of Florida, which occurred this morning.

At a subsequent meeting of the Faculty and Students, the Committee reported the following resolutions, which were unanimously adopted:

Resolved, That by dispensation of Divine Providence we have been bereft of a companion, whose gentlemanly deportment and amiable character had secured to him the respect and affection of all who had made his acquaintance.

Resolved, That we deeply deplore the loss we have thus sustained, but that our sorrow is mitigated by the fact that, although far from his cherished home, he received from the Faculty, from his fellow Students, and from his relatives, every kindness which true and heartfelt sympathy could dictate.

Resolved, That we tender to the afflicted mother and relatives of the deceased our sincere condolence on this melancholy occasion.

Resolved, That as a token of respect, we wear crape upon the left arm for thirty days.

Resolved, That a copy of these proceedings and resolutions be forwarded to the mother of the deceased, and also presented to the Editors of the city papers and of the Southern Medical and Surgical Journal for publication.

L. D. FORD, Chairman.


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<td>8</td>
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<td>50</td>
<td>94-100</td>
<td>n. e.</td>
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<td>9</td>
<td>46</td>
<td>29 84-100</td>
<td>57</td>
<td>79-100</td>
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<td>Cloudy—light rain, all night,</td>
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<td>10</td>
<td>55</td>
<td>74-100</td>
<td>73</td>
<td>67-100</td>
<td>s.</td>
<td>Cloudy—rain,</td>
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<td>11</td>
<td>58</td>
<td>95-100</td>
<td>57</td>
<td>30 11-100</td>
<td>n. w.</td>
<td>Fair—blow—last night 35-100.</td>
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<td>12</td>
<td>32</td>
<td>30 32-00</td>
<td>51</td>
<td>30 34-100</td>
<td>n. e.</td>
<td>Fair—frost, first decided freeze.</td>
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<td>13</td>
<td>30</td>
<td>30 14-100</td>
<td>39</td>
<td>29 92-100</td>
<td>n.</td>
<td>Rain, 70-100.</td>
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<td>14</td>
<td>39</td>
<td>29 82-100</td>
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<td>15</td>
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<td>16</td>
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<td>17</td>
<td>54</td>
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<td>73</td>
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<td>Fair afternoon.</td>
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<td>47</td>
<td>30 7-100</td>
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<td>19</td>
<td>52</td>
<td>30 10-100</td>
<td>68</td>
<td>30 3-100</td>
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<td>20</td>
<td>53</td>
<td>29 91-100</td>
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<td>29 84-100</td>
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<td>Rain, 50-100.</td>
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<td>54</td>
<td>80-100</td>
<td>60</td>
<td>77-100</td>
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<td>22</td>
<td>56</td>
<td>46-100</td>
<td>53</td>
<td>60-100</td>
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<td>23</td>
<td>43</td>
<td>69-100</td>
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<td>50-100</td>
<td>s. w.</td>
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<td>25</td>
<td>34</td>
<td>77-100</td>
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<td>27</td>
<td>35</td>
<td>30</td>
<td>68</td>
<td>30 3-100</td>
<td>n. w.</td>
<td>Tolerably fair.</td>
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<td>28</td>
<td>43</td>
<td>30 6-100</td>
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<tr>
<td>29</td>
<td>48</td>
<td>29 95-100</td>
<td>70</td>
<td>29 87-100</td>
<td>s. w.</td>
<td>Cloudy—shower at 7 p.m.</td>
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<tr>
<td>30</td>
<td>53</td>
<td>81-100</td>
<td>61</td>
<td>80-100</td>
<td>e.</td>
<td>Cloudy—rain at night, 65-100.</td>
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<tr>
<td>31</td>
<td>40</td>
<td>90-100</td>
<td>54</td>
<td>30 5-100</td>
<td>n.</td>
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9 Fair days. Quantity of Rain 4 inches 95-100. Wind East of N. and S. 7 days. West of do. do. 16 days.