before there was any danger that natural labour could come on. When we consider what difficulties there are in the way of getting together the consultants and assistants of our choice, as well as the needful apparatus in an emergency, it will easily be seen that by so doing we give the patient important advantages. It was my request to each of the physicians who were to be present that care be taken to avoid seeing any case of contagious disease on the day of the operation or the day previous. I believe the request was strictly complied with by all, except one gentleman, Dr. J. G. Richardson, remained away on account of the necessity he was under of visiting a case of contagious disease on that morning. Had I been obliged to summon them hastily there would have been no opportunity of observing these precautions. The existence of a well-defined neck of the uterus undoubtedly aided greatly in the application of the *écraseur* and ligature, thus materially shortening the operation. Not the least of the advantages by which the patient and myself were favoured was the presence of the eminent gynæcologists who cordially assisted me in the operation.

Drs. Smith and Goodell extended to me every aid in their power. The former examined the patient with me a few days before the operation, fully approved of what I proposed to do, and saw her, in consultation with me, frequently during her convalescence. To Dr. Harris I am indebted for full access to his very valuable collection of the literature of the subject, which he cordially placed at my disposal. Through the kindness of Dr. Broomall I was enabled to obtain from the Woman's Hospital a skilful and intelligent surgical nurse. But when all did more than I asked of them, it would be invidious to distinguish. I have never seen more united action at a consultation, nor have I ever witnessed a more enthusiastic determination on the part of each to do all in his or her power to promote success, and to the united efforts of all is largely due the honour which belongs to the first successful Porro operation in America.

ARTICLE III.

GASTRIC REMITTENT FEVER OF INFANTS AND YOUNG PERSONS—A DISTINCT DISEASE NOT TO BE CONFOUNDED WITH OTHER FEVERS. By F. PEYRE PORCHER, M.D., Prof. of Materia Medica and Therapeutics in the Medical College of the State of South Carolina, Charleston; Ex-Vice-President of the American Medical Association.

WE meet from time to time with cases of remittent fever of greater or less severity in children and young persons, which are not typhoid or malarial; and as we can get no, or scarcely any, recognition of it from those around us, we propose to examine the question of its existence and true status. No practitioner should be indifferent to such a subject—for errors

in diagnosis may lead to fatal results. The cases vary in gravity; but of eighty or more examples—treated by us during many years outside of hospitals, and concerning which we had not the slightest doubt—all have recovered.

In a prize essay (“Illustrations of Disease with the Microscope”), published by the State Medical Association as far back as 1861, we took occasion to give a brief sketch of “Gastric Remittent Fever,” and to assert, for reasons based upon our own experience, that it had a distinct claim to be considered and treated as a separate disease; that it was not a variety, but a true species—as much so as yellow, typhoid, malarial remittent, intermittent, rheumatic fever, or any other classic malady which has been isolated, and marked down as such in nosological tables.

It is singular to observe how all this is ignored, as it seems to be, by the profession generally, and by some of the text-books in particular. We have not searched them all, but Dr. Geo. B. Wood is one among the comparatively *recent* writers who, as far as we know, does give a pretty fair and full account of this affection, and in a measure separates it from other diseases. Very few recent writers place it as a distinct disease under this title in their indexes, or give a separate chapter to its consideration and treatment. Nor do we find it accurately and fully described in their works. The medical journals, as far as we know, seldom or never refer to it.

It is very often, we think, dependent upon, or associated with the presence of worms in the intestinal canal, and many writers, we admit, treat of “Worm Fever;” but we assert most distinctly that gastric remittent fever has often no dependence upon, or relation whatever to parasites in the intestinal canal; that it is a distinct, separate, isolated affection—and not by any means very rare; that it is of the highest importance to recognize it early; that it requires a treatment peculiar to itself alone; and that it is scarcely ever fatal, if recognized and properly managed at its inception. There need be no fatality about it, as there are no lesions which lead to such a result; there being only an irritation of the gastro-duodenal, or gastro-enteric mucous membrane, and no true inflammation, we think, nor any serious organic alteration of the glands, or other important vital organs—as soon as the *irritation* is removed the *fever* ceases! We do not pretend, as a medical Stanley, to have made all these discoveries alone; we only unfurl our flag over lands partially abandoned, after having been once occupied and marked out; for the disease has its history: was long since recognized, known, and described with more or less accuracy and completeness. Our claim is, that as soon as we saw a few cases and examined their essential features, we noticed its dissimilarity to other forms of remittent fever, and it became clear to us that it was as much an entity as any other disease. Among some comparatively recent authors the disease is divided up among, or merged in typhoid, malarial remittent, typho-

malarial, ephemeral, and worm fevers—all which we regard as essentially erroneous. To confound it with these only as respects treatment, is to run the risk of imparting a fatality to it which it need not exhibit.

As for the great majority of the professional brethren in this State, or in our immediate vicinity, they seem to pay little heed, so far as we can learn, to the existence of any such affection; and yet they must necessarily see and treat it under some other name. But a brief while since we heard it stated that no such disease existed—that the cases of it were only cases of aborted typhoid! Our repeated efforts before the “Medical Society” to secure attention to the subject, and a due recognition of the distinctions we assert to exist in the features of the disease, have failed. We seldom or never hear it reported by members, or recorded in the weekly bills of mortality of this city, or of New York—which we have received for years past.

We shall not undertake to give its bibliography, to enter upon any full or critical inquiry as regards priority of description, and the relative contributions made by the several writers who have described the disease; or to cite each of the authors on fevers or on the diseases of children who have either incidentally, or more or less fully, recognized gastric remittent fever as a distinct and separate affection. But we shall certainly, in our effort to bring about a better understanding of the disease, point out any important discrepancies, or omissions, in its history by the several authors who have referred to it. Our readers must now give us their patient attention whilst we examine opinions by writers of reputation and authority—for they are sometimes dangerous.

Dr. W. Butter, in his “Treatise on Infantile Remittent Fevers,” 8vo. London, 1782 (see Copland’s “Dictionary, Art. Fevers”), seems to have been one of the earliest writers who gave a distinctive sketch of this affection—recognizing and describing its most salient characteristics.

Dr. Charles Lee, the American editor of Copland, though he has given an excellent summing up of the varieties of fever (p. 1120), is often far wide of the mark when he speaks of the excessive danger and fatality of “Remittent Fever”—whilst appearing to allude to this form of fever; but confounding it with malarial remittents—with which it has very slight, if any connection. Dr. Lee says:—

“There is no disease of more frequent occurrence in our country than the remittent fever of children, as with the exception of croup, pneumonia, and in the hot seasons of our large cities, cholera infantum, there certainly is none more precarious in its progress, less amenable to treatment, or more fatal in its consequences.”

We are glad to note that Prof. S. H. Dickson (“Essays on Pathology and Therapeutics,” 1845, chap. “Infantile Remittent”), says of it, “if well managed recoveries are the rule.” In fact, we have no form of remittent fever among children at the South to which Dr. Lee’s description, or sinister forebodings would apply. They would hardly be applicable

even to malarial remittents. Several other writers refer to the mortality of the disease in terms which we will show by the testimony of others and ourselves to be very questionable. Some of these authors declare that it sometimes commences with diarrhoea. We have never seen one out of numerous cases begin with any condition save that of costiveness. This, in our experience, ushers in *all fevers*—glandular and secretory action being arrested at their inception—principally, we suppose, from the influence of the increased temperature (*fever*) upon the blood and the nerves which control the functions of the glands. Neither Wood nor Copland refer to the “red tongue,” which we consider as one of the essential and characteristic marks of the disease. Prof. Dickson says that the tongue is at first furred and loaded, and afterwards “fiery red;” strictly the tongue is never loaded—there is only a white fur over the centre—but in the last observation he is accurately correct, so far as the point and edges of the organ are concerned. He does not allude to the inutility of quinia in the treatment, nor to the great efficacy and power of alkalies, such as soda.

Dr. Laycock devotes a chapter to the disease under the title—which we consider to be the only true and correct one—of “Infantile Gastric Remittent Fevers;”—so we are sustained by, and do not hesitate to concur with these earlier writers who regard it as a distinct form of fever, requiring a special method of treatment; and that it should not be considered a “gastric catarrh!”

Some of the authorities do actually regard the disease as aborted or mild typhoid fever, than which nothing, we feel sure, is more erroneous, or shows a greater absence of perception of its true nature. Gastric remittent fever does not present the *facies* of typhoid fever at any period of its career. Its physiognomy is essentially distinct. The tongue may become dry (though we have never seen it so) at the conclusion of protracted cases, but the temperature variation is not nearly so uniform as in typhoid fever. The evanescent delirium and wandering during or upon waking after sleep, sometimes accompanied with hallucinations, of gastric remittent—which also occurs early in the disease, and is the result of too much heated blood in the brain—is a very different thing from this symptom, as it is met with only in the later periods of typhoid fever. In the latter, delirium and coma and dry tongue, with sordes, occur late; and are caused by poisoned blood acting on the nerves, and the brain—thus depressing the nervous centres, and diminishing the activity of the excretory glands. In gastric remittent fever the intelligence is good, save during the temporary and fugitive delirium; the eyes are clear, and perspiration occurs only at the crisis just preceding convalescence. The tongue is always and necessarily red and pointed—what we call the snake’s tongue—though white in the centre, it is never foul or loaded. Most of the authorities we have referred to, and others consulted, admit that worms are not the sole cause of the disease; one or two assert (erroneously we

think) that they never are. Dickson says they certainly are not the invariable cause. Our esteemed and indefatigable friend, the late Dr. Condie, can scarcely be referring to so benign and easily managed a disease as gastric remittent fever, when he states ("Diseases of Children"): "In every instance it is either a gastro-enteritis, an ileitis, or an enterocolicis accompanied with febrile reaction;" and he remarks that the lesions discovered after death "are chiefly inflammation, more or less extended, of the digestive mucous membrane, in some instances of the stomach and upper portion of the small intestines; in most instances of the ileum and colon." He even speaks also of peritoneal inflammation as a complication, and he advises leeching, etc. The disease we are describing is not concerned in any of its stages with this membrane; in it we have never even seen enlargement of the mesenteric glands.

Copland only, whilst referring to "Complicated Remittent," speaks of "inflammatory states of mucous membrane," and "a foul, loaded tongue with red sides and apex." We would hesitate to describe gastric remittent fever, as we meet it, as an *inflammation*. It is scarcely more than a gastro-duodenal *irritation*—with sufficient intensity only to cause fever, being the result of depraved digestion. But it is difficult to declare when an irritation merges into an inflammation—this being often a question of plus and minus. The irritation, whatever be its nature, certainly is sufficient to cause fever. Evanson had noticed that any exciting cause of irritation, "as swallowing a marble, will give rise to a remitting type with evening exacerbations."

Niemeyer includes in one chapter "Gastric fever, Catarrhal, and Bile fever" under affections of the "*Intestinal canal*"—having before treated of "Acute gastric catarrh" in his section on "Diseases of the *Stomach*." In his Catarrhal fever there is immense excretion and discharge of mucus—the tongue being first coated and furred, afterwards glazed and fiery red. We have never seen this disease; and we never could comprehend why the Germans, and their followers in this country, call so many of their cases of intestinal irritation "catarrh!" In our gastric remittent fever the skin is dry, the system is parched by fever, and there is no secretion of mucus as a distinctive fact from the stomach or intestines; none is either vomited or passed downward in any material amount. We think it advisable to quote what this able writer says of "Gastric Fever," which approaches nearest to the disease that we are considering. We cannot agree with regard to the *exceeding pain* about the joints and limbs, which with us is only found in influenzas, grippe, dengue, etc.; and he fails to notice the red and pointed tongue—which we assert to be obviously an essential characteristic of gastric remittent fever. With these exceptions, one cannot too highly commend the following:—

"Many physicians, particularly among the Germans, describe as *gastric fever* a disease running an acute course, in which high fever is only accompanied by dyspeptic symptoms, and generally by diarrhoea, while there are usually no symp-

toms that would indicate severe disease of any important organ. Celebrated authorities, particularly those clinical observers who have developed in hospital, and have had only hospital practice, consider all cases of so-called gastric fever as mild cases of typhus. I cannot at all agree with this view. Every physician in private practice often has the opportunity of seeing, after errors of diet, without any suspicion of infection, symptoms of variable duration, which exactly answer to those of gastric fever. If this be so, even where we can find no error of diet, we must be careful about inferring that there is an infection, and must acknowledge the possibility that catching cold, atmospheric and telluric influences, and other sources of injury, may excite a similar set of symptoms. But I will not attempt to deny that numerous slight cases of typhus are diagnosticated as gastric fever.

"As a rule, gastric fever begins with several slight chills, rarely with one severe one. The pulse quickly rises to 100 or more. According to the few observations that have been made, the temperature is sometimes normal, in other cases it is decidedly increased; it may reach from 102° to 105° . The constitutional disturbance is very marked. The faintness is so great that the patient remains in bed; the limbs, particularly at the joints, pain 'as if they would burst.' The insupportable headache is usually increased by laying the head on a feather pillow, while it is occasionally relieved by binding a towel firmly around the head. The patient does not sleep at all, or is disturbed by dreams. The symptoms of disease of the stomach or intestines vary. Usually the appetite is lost, the tongue coated, the taste slimy or bitter, the breath is bad, the patient complains of a feeling of pressure and fulness in the epigastrium, and is sensitive to pressure there. There is also eructation of gases and fluids, usually acid products of abnormal gastric digestion. Occasionally there is repeated vomiting. At first there is usually constipation; but later, particularly when the disease is protracted, there is diarrhoea, preceded by more or less colicky pain; the stools are fluid, and coloured green by bile, and are sometimes mucous.

"Occasionally these symptoms pass off quickly, and the patient, who is one day in a sad plight, feels quite well the next (ephemera). At the same time herpetic vesicles not unfrequently come on the lips. We should not consider this a distinct disease, a febris herpetica. Herpes labialis accompanies gastric fever as often or perhaps oftener than it does pneumonic or intermittent fever, and has the same significance in the former disease as in the latter. But the disease does not by any means always terminate in one day; it often continues several days, but rarely longer than a week. In persons who do not bear well the feverish increase of temperature, or the consumption caused by the increased development of heat (we have frequently said that individual peculiarities vary greatly in regard to this), there is great depression, the mind is affected; instead of dreams, the patient has delirium; and, if at the same time the tongue becomes dry, the similarity with typhus is very great. It often happens that the true nature of the case is only explained at the sixth or eighth day, by the sudden improvement and the rapid convalescence."

And here our author takes occasion to warn the physician against being in error in the diagnosis, as he says "even the laity no longer believe that under certain circumstances 'gastric fever' may become 'gastric nervous' and this again develop into 'nervous fever.' They know that these two diseases are of different nature from the first." He tells you how they may be distinguished.

Niemeyer says: "Muriatic acid has a great reputation in the treatment of gastric fever" (3ss to $\mathfrak{zvi}$ of mucilage), furnishing "the gastric juice with the acid to which, as physiology shows, it owes its digestive powers." We have never used acids in our gastric remittent fever—though we have found acids, with gentian, to act brilliantly in certain forms of dyspepsia attended with eructation, which, on that account, are very depressing. "In

catarrhal fever we prescribe," says Niemeyer, "the alkaline carbonates, particularly the tinct. rhei aquosa"—in large doses, as advised by Schonlein—"and can fully support its recommendation as almost a specific in this disease." He elsewhere says: "This evidently depends upon the well-known power of the carbonates of the alkalies to diminish the tenacity of the mucus and render it more fluid." As we said before there is no mucus in gastric remittent fever. We can certainly speak in as high terms of nitre as a diaphoretic, united with soda as a corrective, in our form of fever.

Dr. Flint, in his "Practice" (4th ed., Phila., 1873), describes the disease under consideration, as well as we can discover, under the head of "Subacute Gastritis," and he only refers incidentally to gastric catarrhs; nor is the line drawn very strongly between the two affections, as is done by Niemeyer. Though this distinguished observer advises vermifuges where worms are supposed to be present, he lays no stress upon the verminous origin of fevers in children. In this we think he is mistaken—many cases of gastric remittent fever in children we have traced to the irritation caused in part at least by the presence of worms, as well as by any other irritant. We are glad to find that Flint sustains the opinion that it (subacute gastritis) is very seldom fatal.

Dr. Geo. B. Wood, in his "Article 1st, Irritative Fever," says:—

"*The Infantile Remittent Fever* of authors, so far as it is a distinct affection, is an example of simple irritative fever. Under that name, however, have been described several different diseases, resembling each other only in their febrile and remittent character, and in the circumstance of occurring in children. Gastritis, enteritis, mesenteric adenitis, hepatitis, tubercular disease of the lungs and bowels, and especially enteric or typhoid fever, have been confounded under the vague title of infantile remittent fever." . . . "Yet there can be no doubt, I think, that a remittent irritative fever, corresponding with the definition given, at the head of this article, does frequently occur in young children. Unless in consequence of the supervention of inflammation, which places the disease among the phlegmasiæ, it almost always ends in recovery."

Only a misconception of the nature of the disease, and the abuse of purgatives, could induce this conversion, we believe. He regards it as "identical with worm fever," and distinct from enteric fever. ("Practice of Medicine," vol. i. 220.)

That we are correct in our opinion of the importance of a critical inquiry, inasmuch as the profession seems to be at sea on the subject, we need only quote also the opening paragraph from Dr. J. Lewis Smith's chapter on "Remittent Fever" in his "Diseases of Infancy and Childhood," Phila., 1876.

"If a physician were to consult the standard treatises on diseases of children, in order to ascertain the nature of remittents he would rise from the perusal with no clear idea of it. One tells us that the remittent fever of children is identical with typhoid fever of adults; another, that it is a gastro-intestinal inflammation; and finally, Hillier believes that there is properly no such disease, and that the term should be dropped from the nosology of children. There is, however, a remittent fever of children as well as adults, and much of the confusion which exists in reference to it arises from the fact that writers have not kept in view what constitutes a fever. Febrile action which has a local cause is not an essential fever, and should not be described as such."

Smith does not devote fifteen lines to the treatment, nor three pages to the whole subject. "If we have ascertained by a careful examination that the fever is remittent, and not symptomatic but essential, there is one remedy which is required in nearly all cases, namely, quinia, or its equivalent, cinchonia." Quinia is useless in true gastric remittent fever! As we have shown by its actual test in five obstinate examples, and by curing without its use every other case.

So able and generally satisfactory a writer as Jno. Syer Bristowe ("Practice of Medicine," Phila., 1876) gives a very brief, and we must say a most inadequate, sketch of "remittent fever," and makes no allusion whatever to the infantile form of it. He says that intermittents and remittents are convertible the one into the other as accident determines, and that there are no distinct lines of demarcation between them. *Gastric* remittents never become intermittents! As they depend upon a local irritation for their cause, and not upon malaria, their symptoms cannot intermit. Their remittent character is preserved up to recovery.

We desire to be concise in the sketch of the disease as seen by us. We entitle it "Gastric Remittent," because the stomach itself (and perhaps the duodenum, for it is difficult to fix precise limits), and not the intestines, as in a true enteric fever, like typhoid, is the seat of the disease; and, not to refine too much, it is not necessarily "infantile" in the strict sense of the term. There are always daily remissions, which have not the regularity that is found in typhoid fever. The absence of the gravity, the distress, and other symptoms belonging to the latter, which it is needless to mention, strike the beholder at the first view of a typical case of gastric remittent fever.

Sketch of the Disease.—A child, or young person, living in the city of Charleston, for example, if breathing marsh malaria at all, very rarely receives it in so concentrated a state as to suffer by this cause alone from intermittent, from congestive, or even from what may be styled an attack of bilious remittent fever. But should the same child be subjected to a repeated or long-continued course of improper nourishment, including all things that are hurtful—cakes, confections, unripe fruit, etc.—after a time nutrition becomes impaired or arrested; the necessary digestive juices being imperfectly elaborated from the irritated and depraved condition of the mucous and glandular structures, effete matters accumulate in the system each day more and more; the wheels of life are finally clogged, the play of affinities between the organs are disturbed or arrested, and fever is declared. The source of this fever is local, and its cause, irritation, of course. Every thing has been slowly conspiring to this end, but it requires sometimes the addition of a cold, perhaps, or other disturbing cause, to develop the fever, which is not an intermittent, but a *gastric* (or *gastroduodenal*) remittent. It is always a remittent, generally lessening

during the early morning, to be increased at night, until it slowly disappears after one or more week's duration, when the local effects of the irritants are removed. Sometimes, though rarely, the fever is very high, but it varies in intensity in proportion to the sum of the causes which produce it, and the strength of the constitution; by which term we mean the general endowment which the organs of the individual possess for performing their healthy, normal functions—and consequently for regaining those functions when impaired by excesses. Even when a cold, or other accidental additional cause, does not hasten the development of the fever, it is produced suddenly—*d'emblee*, as the French call it—seemingly by an effort of nature to rectify the abnormal condition, gradually induced by the depraved state of the nutritive organs, which has reached, as it were, its climax. But this fever is much more than a mere *gastric embarrassment*, if it is not a direct result of gastric, or gastro-enteric irritation, or inflammation. We incline to the belief that it is nothing more than an irritation—but drastic purgatives might intensify and prolong the mischief, and convert this into an inflammation. Copland affirms that it is decidedly *not* an inflammation. At any rate the *fever* indicates the general disturbance—the commotion of nature, as it were—accompanying the efforts of the system to throw out the morbid products generated. The remedial measures, which will be given in detail afterwards, tend logically, we may say, to aid in restoring the imprudent—oftentimes innocent—sufferer to his pristine condition.

When one, whether child or adult, with these gastric or gastro-enteric complications removes to, or resides in a malarial region, he is liable to suffer from the usual result of malaria—which, *when it affects any system with healthy organs*, produces only *intermittent* fever, or chill and fever. But under the conditions just specified the attack must necessarily be *superimposed upon the gastric or gastro-enteric derangement*—whether this be irritation or inflammation; and the resulting fever, when this complication exists, in our opinion, will invariably be a *remitting* fever; and the treatment, to be safe and quick, must be directed to both conditions or elements in the disease which results. In other words alteratives, revulsives, antipyretics, cold applications, must precede or accompany the use of quinia or other mere antiperiodic; for we have in both cases an irritated or congested condition of the gastro-duodenal mucous membrane *plus* the malarial poison.

Gastric remittent fevers, be it observed then, *are not confined* to cities; but they *may* occur just as frequently (though probably under a graver type by reason of the greater amount of malaria in the country), in situations where fevers of paludal origin are rife, and where *malaria* is generally, but often erroneously, thought to be the *sole cause* of all the remittent fevers which manifest themselves—thus often leading to great errors, or

important omissions in treatment. We shudder to think how many cases of uncomplicated gastric remittents have been unrecognized and mistaken for malarial fevers. Uncomplicated gastric remittents can also be met with on the highest mountain plateaus, where not a whiff of malaria exists. If this be true, surely then malaria need not always enter as an element in the problem of treatment.

We say, therefore, that a fever with a gastric or a gastro-enteric complication is always a remittent or, possibly, a continued fever, because we believe that the *constant presence* of the gastro-intestinal irritation, maintains and keeps up the continued circulatory excitement and pyrexia (*fever*, in other words)—the malaria being responsible only for the periodicity.

Often, were it not for the gastric irritation, or the weak organ, the fatigue, the exposure to a sudden change of temperature, the individual would escape even though exposed to the malaria—and thus many do escape. At any rate there are two important elements referred to above, either or both of which may be present, and which have to be considered in the treatment.

We may refer in passing to a third form, namely to *bilious* remittent fever—using it as a distinct term—because we believe that remittent fevers occurring in malarial regions are often accompanied in dissipated persons, or those of bilious temperament, by marked disturbance, congestions, etc., of the biliary organs—the liver being implicated, in addition to the gastroduodenal tract, much oftener than either in intermittents or in the gastric remittents which we were describing. We never hear of a *bilious intermittent*! But intermittents, agues, chill and fever lead to chronic enlargement of the liver, spleen, and mesenteric glands, followed by anæmia, leucocythæmia, and other blood degenerations—which are natural results of the congestions occurring in these blood-making organs during the cold stage. These results never occur in gastric remittent fever.

Now gastric remittent fevers, as we have said, are a not uncommon form of disease, particularly among children in the city of Charleston. They are *characterized* by a not very high thermometric range— 100° to 103° —by a slight tenderness upon pressure over the stomach and duodenum, by a mild and evanescent delirium specially upon waking, even during the day; by the absence of the characteristic look of typhoid fever—that of lowness, depression, and exhaustion—and by a tongue *pointed* and *red* at the point and margin, with a white fur in the centre. The tongue is seldom if ever what is called foul, or loaded, as in bilious, and sometimes in intermittent fevers; nor has it a yellow fur as in disorders where the liver is particularly involved. We do not regard the recognition of the exanthem of typhoid as essential to its diagnosis—but we certainly will not find it in gastric remittent fever. We have never met with herpes labialis in any of our cases.

Treatment.—It follows naturally that gastric remittent fever can be brought to a successful termination: never by quinia alone, as in pure intermittents, but by mild mercurial alteratives (a half to three or four grains of calomel, two to four of magnesia and rhubarb each, to which the same quantity of soda is added—occasionally used at the beginning of the disease merely to act as a corrective and laxative—one powder being often sufficient; a few grains of Dover's powder may be given at night occasionally, or after the above alterative laxative powder has acted. The following combination has, in our experience, been sufficient in all cases to reduce and abolish the pyrexia:—

R. Sweet spirits of nitre, ℥j-ij; sup. carb. of soda, ℥ij-iv; water to ℥viii.—M. S. A tablespoonful every two to four hours, as long as the fever exists. Lime-water, or other similar agents, may be given repeatedly. Revulsives of mustard should be applied to the abdomen at least twice a day, and mustard foot-baths ordered at night, so as to assist in removing the gastric irritation—with cold sponging to the head and arms freely and continuously employed for ten to fifteen minutes at a time, whenever the fever rises. These measures combined reduce temperature, correct the gastric derangement and prevent delirium. Quinia may be employed afterwards, if at all, only as a tonic. Such a course of treatment it may be safely asserted scarcely ever fails—never in our experience.

The nitre in the above prescription reduces the fever, and the soda corrects the disordered condition of the gastro-duodenal mucous membrane. We sometimes add one or two drachms of camphorated tincture of opium to this mixture, and, if the fever is high, one or two drops of tincture of aconite to each dose.

The following passage we translate from M. Mialhe (*Chimie Appliquée à la Physiologie et à la Thérapeutique*, Paris, 1856) to show that it is not easy to exaggerate the effects of soda—regarded by superficial observers as a corrective of acidity only.

“Alkaline agents (of which the preference is not important, potash being quite as good as soda) give rise to and disengage ammonia in the system. . . . The alkalies by reason of their importance in the natural phenomena of decomposition, of absorption, of oxidation of sugar and starchy substances, of fatty matters, oils, and resinous substances, are at the head of the most useful and much used medicines. They maintain the blood in its necessary degree of viscosity, fluidify its too great coagulability, increase circulation, dissolve the principal elements (albumen and fibrine), which constitute the bases of nearly all engorgements. They liquefy the elements of the bile, prevent them from becoming thick, from concreting together, from forming calculus. They reanimate and regulate intestinal digestion; facilitate the secretions; saturate the acids, which, taking their origin within the economy, can, through their excess, occasion disease: such as gout, rheumatism, diabetes, or those insoluble collections constituting chalky concretions, urinary calculi, deposits, etc.”

Copland recommends sulphate of potash and rhubarb as a mild laxative in gastric fever; and we have seen our friend and former colleague,

Dr. D. J. Cain, now of Asheville, N. C., employ it successfully, used at the inception of the attack.¹

Let us relate briefly two *cases* for the instructive contrasts they afford:—

CASE I.—A lady in good health, residing in a pine-land summer resort, of doubtful reputation as regards health, after undergoing much anxiety, much fatigue, and exposure to night air, fell ill of fever with repeated chills, and refusing to take quinia died in twelve days of algid fever. Though not managing her case, she was all the while immediately under our eyes.

CASE II.—Her daughter, aged 8 years, also a healthy girl, was taken sick a fortnight after. During the illness of the mother and previously, a careless nurse had given her everything that was hurtful to her digestive organs—she had also been exposed to cold, etc. Living in the same house with these cases, and the last falling under our care, we did not hesitate to pronounce it one of uncomplicated gastric remittent fever. She had fever for a fortnight with daily remissions, and she had the treatment indicated above: A few grains of calomel and rhubarb at the beginning, the febrifuge mixture of soda and nitre, a few grains of Dover's powder at night, cold sponging to the head, hands, and arms, mustard plasters to the pit of the stomach, with hot pediluvia at night. Though she seemed quite ill, she recovered perfectly without taking a single grain of quinia—notwithstanding the history of her mother's case fresh in our recollection—and with its warning against the danger of omitting the use of antiperiodics. It required all our courage to neglect this warning—in the face, too, of the outside clamor.²

¹ The following was received from Dr. S. Baruch, of Camden, S. C., in reply to a letter:—

"The disease you allude to as gastric remittent is one that I have recognized and treated long ago. It occurs chiefly in children, but not exclusively. It is distinctly remittent, but does not yield to quinia until the prime viæ are thoroughly restored. There is excessive proliferation of epithelium, with secretion of—or rather formation of mucus, giving rise to what the Germans call gastric catarrh. The treatment I follow is a dose of calomel and rhubarb to cleanse and prepare the way; then aconite and nitre, sponging, and other expectant anti-febrifuges. I order a dose of quinia early in the morning, but I find that it does not prevent the accession of fever, until the mucous membranes are relieved of the mucus and their epithelium. I use quinia in repeated doses, feeling my way until the effect is pronounced. The difference between this fever and malarial remittent is pronounced in the efficacy and immediate antidotal effect of quinia in the latter, and the difficulty of effecting a prevention of the exacerbation in the former. In the one (malarial) it acts as an antidote and specific against malarial infection—in the other its influence is upon the nervous system, preventing a return, just as it does in intermittent neuralgia (not malarial). It approaches a low fever, presenting typhoid symptoms, but the bowels are not easily moved. It is an obstinate affection, yielding only after considerable medication. I believe it has some tendency to self-cure, but this can be aided materially by treatment. Such is a brief and imperfect view of gastric remittent as I have seen it."

² We may be pardoned for relating the following as a war record: We attended a young gentleman in Virginia who was believed to be desperately ill by all who were around him; as he had a persistent, high fever for many days, and even in daylight, when awake, was delirious—seeing objects such as is common to those with delirium tremens. We have seen this symptom three times in cases of gastric remittent fever. We assured his friends that it was a case of gastric remittent fever, and that notwithstanding sinister appearances, he would surely recover. This prediction being verified, the grateful mother gave us a *hat* which cost in Richmond \$250—in Confederate money!

The frequent and prolonged use of calomel and opium, or of purgatives, for days—which are, or were supposed by some, essential to the relief of gastro-intestinal inflammation, as well as to the management of the so-called bilious or country fever,—or an exclusive reliance on quinia, are uncalled for, if not decidedly injurious in cases of gastric remittent fever.

In bilious remittent fevers of great violence, dependent upon great intensity of the malarial poison, and where there is evident torpor, or congestion, or chronic disease of the liver, calomel and quinia, with other appropriate means, may be used before the paroxysms often with great advantage. But mercury, calomel and opium, or drastic cathartics, need not be given every four or five hours for days—as was once, may be is now, the practice with some—for their supposed curative powers *in any fever*, save the guarded use of calomel and opium as an alterative absorbent in inflammations of the fibrous or serous tissues, pleuritis, peritonitis, iritis, etc. Some believe that the opium alone is sufficient. Thus given it *irritates and keeps up* the gastro-enteric irritation, or inflammation, and with it the fever and general excitement of the system. We have treated ninety cases of malarial fever in the Marine Hospital, Charleston, many of them of great severity, with but one death—where only a single initiatory dose of calomel was given occasionally. Sulphate of cinchonia was used to test its virtues as an antiperiodic. (See report in *Charleston Medical Journal and Review*, vol. xiii., 1858, and “Prize Essay,” p. 69.)

Agues, pure intermittents, and fevers of verminous origin, are very different things. In these a single mercurial laxative, quinia, arsenic, or an appropriate vermifuge are amply sufficient, because it is of unmixed malarial origin in the one case, and the existence of a parasite in the other—hence the specific or the vermifuge is omnipotent.

These distinctions must be kept ever in mind, in order to avoid useless or injurious medication, or the omission of that which is essential.

ARTICLE IV.

AMAUROSIS FROM LESIONS OF THE EYEBROW OR ORBITAL REGION. By J. SANTOS FERNANDEZ, M.D., of Havana. Translated from the Spanish by A. B. DE LUNA, M.D., of New York.

WOUNDS of the superciliary region, and the loss of sight which often follows, have always been studied with much interest, but so far no satisfactory explanation has been offered regarding the relation between the solution of continuity and incidental amaurosis.

Previous to the discovery of the ophthalmoscope many cases had been reported, but they are as vague as the more recent reports in which an examination of the internal eye has been neglected. That the ophthal-