The Appropriate Treatment of Dysentery.—A Clinical Lecture, delivered at Jackson-street Hospital. By ROBERT CAMPBELL, A.M., M.D., Demonstrator of Anatomy in the Medical College of Georgia.

"All practical medicine depends upon a knowledge of three things—to wit: 1st. Pathology; 2nd, The articles or agents of the materia medica; and, 3rd. The relations between these two elements."—[Bartlett's Philosophy of Med. Science.]

GENTLEMEN:

In our discussion of the "Treatment of Dysentery," so varied, inappropriate and often irrational and incompatible were the measures, found to have dominion over this most important and common field of interest—that it became necessary for us to inquire into their value, as well as the appropriateness of their application to the existing state of this disease, and also into the probabilities which were derived therefrom, in favor or against accomplishing, by them, the relief of that condition.

And thus, were we obliged to lead you back to "first principles," in giving you a common-sense view of these different systems, that you might apply the gauge of reason to whatever of error or assumption might have obtained sanction in these premises, and so be enabled to select from the varied and antagonistic doctrines in vogue, whatever of good they might contain, to the rejection of that which might operate in direct opposition to the attainment of the ultimate object in view. In
short, we have thus dwelt, to some extent upon this subject, for the express purpose of co-ordinating and systematising the treatment of this disease. And we have been able to gather, in our survey of this field, some facts which were good and fit to garner up, but so scatteringly have they been strewn, and so commingled have they been with the greater amount of worse than useless and pernicious chaff—so much have these principles been found to operate to the effect of "blowing hot and cold together"—as to call for the exercise of much discrimination and the adoption of a system of stern and uncompromising selection.

Some of the plans of treatment in use—and by far the most valuable—we have yet to notice.

There have been proposed, from time to time, many valuable remedies for the relief of this disease—and would it not have been remarkable, at this stage of the world's history, if accident or experiment had not pointed out the fact, that the exhibition of certain medicinals was followed by good results in this disease; and this knowledge had not come in reference to those agents, under these circumstances, empirically; especially, when we consider, that thus, is first derived almost all of our knowledge concerning the action of remedies in general?

But in this case, whether from the conflict between a false conception of the pathology of this disease and the manifest results of these agents; or from the stubbornness of preconceived notions in perverting the interpretation of these manifest results, it appears always to have happened—that although there has been long in use, some appropriate treatment for this disease, yet it has existed in such fragmentary parcels, and has been so mixed up and incongruously yoked with so much of countervailing force, as steadily to have maintained, here, an unsettled state of our science, or an entire stasis in this particular.

And this brings us to notice a certain class of remedial agents, which constitute what we may call the "appropriate treatment" of this, the intestinal element of Dysentery, on account of the applicability and the correspondence of their therapeutic action—their specific agency, in supplying the demands incident to this diseased state, as determined by the characteristic qualities of the organ and tissue involved, as well as the circumstances in which they are found, and whose abnormal
condition constitutes this disease; and especially, as experience has taught us, that all or most of this group of remedial agents have been found invaluable for the cure of this very disease.

Let us now return and see, what are the indications, which are involved in this local condition, and what are these remedies, whose specific properties of action, experience has taught us to be of that character, which would be best adapted to meeting the exigencies of this case. We have seen, that there were two indications derived from our consideration of the state and circumstances of the intestinal element of Dysentery. We will now consider them separately.

First—There is Inflammation of a Mucous Membrane—Requiring its Own Peculiar Treatment.

Now, the Science of Therapeutics may be said to have been based upon the fact, that certain agents, derived from the three great kingdoms of Nature, are found to exert a decided influence upon the living organism when brought in relation with it; and farther, that "they have particular tendencies towards certain parts of the body, over which parts they exert a peculiar and special influence."* The arrangement of medicines, or their classification, is made according to the knowledge of what these tendencies are. And, says Headland, (in his recent and very valuable "Essay on the Action of Medicines,") "This classification is certainly more scientific than a mere empirical arrangement; and it will be so far of use, that it will enable us, when we wish to make an impression on a certain organ or set of organs, to select those medicines which especially influence it or them. . . . There is no doubt whatever," says he, "of the existence of these local tendencies or partialities,—their proof," he continues, "depending in part upon the fact, that medicinal agents are actually detected, in many cases, in the very organs over which they exert a special influence."

It is maintained, on the high authority above quoted—"that medicines must (as a general rule) obtain entry into the fluids of the body—pass, that is, from the intestinal canal into the system at large—before their action can begin"—unless—we would suggest—the part to be affected by them be external or superficial and their immediate application is thus rendered practicable.

* Headland.
And just here, we would object to the proposition, as a general rule, which requires in all cases, that every particle of all kinds of medicines must be absorbed into the circulating mass, before they can manifest their peculiar action in the direction of their appropriate organ or tissue. For instance, in the case of the mucous tissue of the alimentary canal—the very surface upon which, as a general thing, all medicines are thrown—why may not these agents be applied in sufficient quantity, as not to admit of an entire absorption of every particle, to travel the round of the circulation and be directed to the same surface by which they were taken up, before they can manifest their peculiar agency—when their application is primarily and immediately made to that superficial surface?

The advantage here is, that whilst such a surface is acted upon in the usual way, that is—according to this author—by imparting its impression or influence to the tissue or organ in its transit through it, or its elimination by it, (for this is the manner in which he accounts for the action of medicines upon secrening organs and tissues, generally); in this case, the tissue has the advantage of its first contact and its transit through it, into the circulation, as well as its return through the tissue, to be eliminated in its proper form, by the mucous follicles of this surface. Take, for instance, the action of Turpentine, whose modus operandi he explains in the manner just given—Are we to understand, that all the Turpentine voided in the alvine discharges, has gone the round of the circulation and has been secreted, as Turpentine, by the mucous follicles of the intestinal canal? Be it so—its operation must be the same, and upon the same tissue. But we prefer to believe, that a good portion of it becomes mixed with, and impregnates, the contents of the canal, and thus passes by the shorter route, in contact with, and imparting its influence to, this surface.

But to return—There is, in Dysentery, an inflammation of a mucous membrane, requiring its own peculiar treatment.

Now, the treatment of this inflamed mucous membrane is to be derived from that class of remedies, unquestionably, whose known specific qualities of action, affect the condition of this tissue, wherever it exists. Then let us see, what articles of the
Materia Medica, are found to be suitable for supplying the demands conveyed in the proposition here reiterated.

There is Ipecac—a "mucous membrane remedy," whose value as a remedial agent was first disclosed by the benefit derived from its use in Dysentery; and consequently, this has ever since been considered, by many, a reliable form of treatment for this very disease.

It is recorded, that "John Helvetius, grandfather of the celebrated author of that name, having been associated with a merchant who had imported a large quantity of Ipecacuanha into Paris, employed it as a secret remedy, and with so much success in Dysentery and other bowel affections, that general attention was attracted to it; and the fortunate physician received from Louis XIV., a large sum of money and public honors, on the sole condition that he should make the remedy public. From this period it has maintained its standing among the most useful articles of the Materia Medica."

Dr. Wood says that—"In Dysentery it has been supposed to exercise peculiar powers, but is at present less used than formerly, in doses sufficient to excite vomiting."

Now, these peculiar powers, we would venture to suggest, are alone dependent upon the specific properties of this remedy, in altering the condition of the mucous tissue, wherever it exists—this being a disease whose local element is an inflamed mucous membrane—hence the benefit derived from its use. And if proof of this proposition is demanded, it may be established from the experiments of Magendie, with the active principle of this agent, from which it was shown "to have a peculiar direction to the mucous membrane of the alimentary canal and the bronchial tubes. Ten grains of the impure alkali, administered to dogs, were generally found to destroy life in twenty-four hours, and the mucous membranes mentioned were observed to be inflamed throughout their whole extent." And further, it is stated, that the "same result took place when emetia was injected into the veins, or absorbed from any part of the body." And with the same testimony may be placed the effect of the inhalation of the powder of Ipecac into the lungs, producing bronchitis, as well as its injection into the veins, giving rise to pneumonia, as was shown by Magendie's experiments. When
Ipecacuanha is employed in this disease, it is not used as an emetic, but as an "anti-dysenteric"—for its introduction into the rectum, without causing vomiting, is said to be just as efficacious as when taken into the stomach; and that it has been found to be most beneficial when tolerated. This tolerance is urged by some practitioners to the extent of causing the retention of very large doses, without inducing vomiting, even 3 j. doses being administered every two or three hours in some cases.

Although Ipecac is a remedy whose specific properties are determined to the mucous tissue, and therefore being appropriate in its application to Dysentery; and although it still has many advocates—yet there are elements to be derived from the same group of agents, to which it belongs, which are less objectionable in many respects, and which appear far more suitable and are more decidedly efficacious in the cure of this disease.

Now, among this group of remedies, which may be said to be rationally specific in this disease, we find also, Benzoin, Balsam Copaiba, Creosote, Turpentine and the like—all which are well known, rightly to merit a place in this class of remedial agents—each presenting sufficient testimony in its favor, to prove its applicability to the disease under consideration; and were all other evidences absent, of the ultimate nature of this disease—the fact that these remedies, whose operations were manifested in the production of certain phenomena, whether under health or disease, in the mucous tissues of the body, as found in other situations—the very remarkable results of their exhibition in the relief of Dysentery, might be taken as rational grounds for determining the situation and character of this affection. And thus might Therapeutics furnish the link and clue in a broken and obscure Pathology.

The tincture of Benzoin, or "Tinctura Benzoini Composita" of the Pharmacopoeias has been recommended in doses of from f 3 ss to f 3 ij, as a valuable agent in some of the stages of Dysentery, and our limited experience of a single case would bear testimony thus far, to the validity of its claims to consideration. That case was one in which, after a very severe attack of Dysentery, in an extremely feeble constitution, it became compli-
icated with Diarrhoea, and the appropriate response to either of the indications, manifested in the mixed character of the symptoms, having failed to relieve, or having appeared even to aggravate this condition—the plan was adopted of treating the inflamed tissue, irrespective of the number and character of the discharges, and the effect was magical—the patient, a physician's wife, was convalescent very shortly after the change of treatment, and perfectly recovered. We are aware, that by citing a single case to establish any point, we are laying ourselves liable to the charge of driving a post hoc, propter hoc conclusion, but we give you that isolated fact at what it is worth, supported as it is by the commendation of the remedy, by others, based upon a more extended scale of experience; and would advise you to bear that fact in mind, to serve you, if ever a similar set of complex circumstances as above recounted, should demand its application, as the only alternative.

We quote from an article* in the London Lancet, the following paragraph, viz.— "When the functions of the colon are performed in a healthy manner, the faeces are figured, of a firm consistence, and of the well-known color. In Dysentery, or, as is sometimes called, colitis, this function is completely in abeyance; but whether this is produced by the relaxed state of, and consequent want of tone in, the muscular coat, or from the extreme irritability of the mucous membrane of the intestines, or of the character of its contents, or all combined, I cannot determine. The compound tincture of Benzoin I have found, when administered in this disease, particularly useful in restoring, and that in a very short time, this function of the colon. Whether it also acts beneficially by protecting and sheathing the ulcerated portions of the gut, or by its stimulating qualities induces, just as it does in chronic ulcers of the surface, the reparative processes to go on more rapidly, I am unable to determine. The tincture of Benzoin, I need scarcely say, consists of Benzoin, Styrax, Tolu, a small quantity of Aloes, and spirit. The dose generally given is from fifteen to twenty minim's." The writer then reports a number of instances in which he had met with its striking beneficial effects.

The marked benefit, so long known to be derived from the

application of this balsam, to ulcers and wounds, may have some reference to its mode of operation, when applied to the sore surface of the mucous membrane, in this disease.

The influence of *Balsam Copaiba* over the mucous membrane lining the urethra is familiar to every tyro in medicine. According to Pereira, "it also acts as a stimulant, but in a less marked manner, to other mucous membranes; namely, the bronchial and gastro-intestinal membranes." He states further, that "the greater influence of Copaiba over the urethral than over other mucous membranes is by some explained thus:—Besides the influence which this receives in common with the other membranes of the same class, by the general circulation, it is exposed to the local action of Copaiba contained in the urine, as this fluid is expelled from the bladder. If this hypothesis were correct, the influence of Copaiba over the mucous lining of the bladder would be greater than that over the urethral membrane." Now, the fact is here plainly enough enunciated—that whilst this group of medicines are classified because of their peculiar property of spending their agency upon the mucous tissue wherever it exists, there are at the same time individuals of this group, which although exerting their influence upon this tissue everywhere, yet, having a more decided control over its condition in certain parts—owing perhaps to the slight modification of structure in those special localities, dependent upon the variable office required of this component tissue to perform, as involved in the function of its own complex organ. And it is equally true, that some of the members of this class of agents are found to be of more restricted, while others are of more general, applicability:—i.e., that some, whilst they act on all mucous membranes more or less, act upon that tissue in a very decided manner, only as it exists in one or two situations—while others, operate in a marked degree in all or nearly all its distributions, as, for instance, is the case with Turpentine.

As regards Balsam Copaiba otherwise, than in its special application, Dr. Cullen spoke favorably of its use in hemorrhoids, about a century ago. He says, "I have learned from an empirical practitioner, that it gives relief in hemorrhoidal affections; and I have frequently employed it with success. For this purpose it is to be given, from 20 to 40 drops, properly mixed with
powdered sugar, once or twice a day.” Since his time, it has
been used, variously combined, with happy results, in other
affections of the intestinal canal, as for instance, “in chronic in-
flammation of the mucous membrane of the bowels, especially of
the colon and rectum.” One of the properties of this medicine,
as generally laid down in its history, and as is familiar to every
practitioner, is that of acting somewhat upon the bowels as a
purgative, or rather laxative. And there are to be obtained, by
a perusal of the recorded history of practical medicine, glimpses
of evidence scattered here and there, of the great value of this
agent in the treatment, not only of the chronic, but of every
stage of the disease now under consideration. In fact, the term
*chronic*, is, for the most part, of arbitrary significance—some de-
signating such cases thus, which are not relieved, in what they
consider a reasonable length of time; while others, especially in
reference to this disease, apply this qualification to such cases as
those in which the symptoms are prolonged by persistent ulcer-
ations in the mucous membrane of the intestine, which owed
their existence to an attack of Dysentery.

Dr. LaRoche, in an essay on this subject, bears staunch testi-
mony to the efficacy of Balsam Copaiba in this disease. As
likewise does Dr. Meigs, of Philadelphia. This is used accord-
ing to Eberle’s formula, that is, in emulsion made with sugar
and gum arabic, or dropped upon sugar. A friend of ours, who
is an intelligent physician, informs us, that he has no other
treatment for Dysentery than the Balsam Copaiba; and that his
success with this agent leaves no room for a desire to improve
his treatment.

Such is the written, as well as the un-recorded testimony in
behalf of this measure; and although we are not able to bespeak
its adoption, from our own experience, yet, we must say, upon
the testimony of others, and considering the acknowledged at-
tributes of the remedy in relation to our conception of its appli-
cability to the peculiar requirements of the diseased condition,
organ, and tissue involved, *we would heartily endorse it, as a mode
of treatment, never to be lost sight of, with reference to Dysentery.*

*Cresote* has recently gained much advocacy in the treatment
of Dysentery. It was first used by Dr. Wilmot, as a remedy in
this disease, in its local application by enema. Thus, it is re-
corded in Ranking's Abstract for 1846, that—"In a severe form of Dysentery which occurred near Tunbridge Wells, and in which all methods of treatment appeared unsuccessful, the mortality being as high as 25 per cent., Dr. Wilmot thought of trying Creosote enemata in the strength of 3j. to 3xij. of Starch. This remedy produced a speedy amelioration of the disease. It will be perceived, that this agent must have acted, under these circumstances, for the most part, by its immediate application to the diseased tissue. More recently, valuable results have been obtained nearer home, and principally in the West, from the internal or per orem administration of this remedy.

In our Lecture on the Pathology of Dysentery, delivered in November, you will recollect, that we had occasion to quote from an article entitled "Creosote in Dysentery," by Dr. Wm. H. McMath, which furnished decided proof of the value of that agent, in the treatment of this disease. We have just had the good fortune to meet with another very excellent contribution to the New Orleans Medical and Surgical Journal—"An Essay on the Ætiology, Pathology, and Treatment of Epidemic Dysentery,"* which adds a volume of evidence in favor of the great consideration to which this agent is entitled, as a remedy for this disease. The author, after dwelling upon the Pathology, &c., of the disease, in which we are gratified to find, that some of his views are in accordance with our own—viz., in this, that "A Dysentery having its origin from the general condition of the atmosphere differs from the intermitting and remitting fever only in the intestinal affection, and requires a similar treatment"—then makes the following record of his practice, and that of others, upon the same plan—viz: "I have usually opened the treatment by administering some mild purgative, and a favorite one with me has been a combination of Hydrarg. Cum Creta and Pulvis Rhei; assisted, if necessary, with the Syrup of Rhubarb. After the action of which, I prescribe the following mixture:

B.—Creosote, gtt. x.; Acetic Acid, gtt. xx.; Sulphate of Mor- phine, gr. ij.; Oil of Sassafras, gtt. iv.; Distilled Water, 3j.; in

* By Joseph B. Payne, M. D., of Magnolia, Arkansas.
teaspoonful doses every three hours, until the discharges are checked, and the bowels quieted.*

If there was any visible remission in the febrile symptoms, I usually anticipate that period with the administration of Quinine. Such is the treatment I have followed, in passing through two epidemics, and success has crowned it in nearly every effort. I could enumerate case after case where this course has been followed, and success the result. I have seen and assisted in treating in all, more than two hundred cases of Dysentery. In the October number of the *Nashville Journal of Medicine and Surgery,* (page 306,) there is a short article by J. W. Brown, on the use of Creosote in Dysentery. He says, "Drs. McMath and Gilder, of Louisville, Arkansas, tell me they have treated as many as three hundred cases, and in all proving perfectly satisfactory, under the use of Creosote." Their prescription, as is given by Dr. Brown, is the same as I have given it, except the oil of Sassafras, which is an addition of my own, merely to cover the disagreeable smell and taste of the Creosote, which it effectually does. "Now, if there is any honor due to the builder of this recipe, and its use advised in the treatment of Dysentery (which there undoubtedly is), that honor is due to Professor A. P. Merrill, of the Memphis Medical College. I saw him use it both in Dysentery and Diarrhoea, with the happiest effects. When I returned home, I informed my preceptor, Dr. Gilder,

*As to "checking the discharges" with an opiate, we think the Doctor is in error; and we would here beg leave to object to the Morphine, as an ingredient in the Creosote mixture—as we conscientiously believe the indiscriminate and unconditional routine of administering Morphine every three hours, to be detrimental—a drawback to the plan of treatment—and that the Creosote in these cases manifests its curative powers, in spite of the hindrance. Mr. Headland's opinion, as regards certain effects of Opium, is the following:—He says, "Opium is a diaphoretic; but it diminishes all the other secretions, and most especially that of the bowels. It is certain that there are other narcotics and sedatives which are able to relieve pain, but which neither cause constipation, nor produce cerebral congestion." And again, "Opium is a general paralizer to muscular fibre, both of the voluntary and involuntary kind, but particularly of the latter. And the only reasonable attempt that can be made to explain the action of Opium in producing constipation, is by a reference to this its paralyzing influence on the coat of the bowel, taken in conjunction with the torpid condition of the general system, and suspension of the animal functions, produced by the secondary action of this narcotic on the nervous forces."
of the use of Creosote in Dysentery, and we both passed through the epidemic of 1855, as above-mentioned. Drs. McMath and Gilder have since used it with unequalled success."

Now, as to the therapeutic properties of this agent—according to Mr. Headland—"Creosote stands, as a medicine, between Hydrocyanic Acid and Turpentine. It has a double action; being anodyne, like the former; and a mucous stimulant, like the latter." Also, that "Creosote is a sedative, and cannot be well given in such large doses as to act upon distant parts." As such a practice would be attended with danger.

It will be perceived from the foregoing, that the treatment of Dysentery with this element, from among that class of remedies which exert an influence upon the mucous tissue—constitutes it an "appropriate treatment"—the importance of which is sufficiently established, and it is amply commended to you as such, by the recorded results of its wonderful operation. Although, from our want of practical experience with the remedy, we can furnish no additional support, from our own observation upon this subject; yet, we would have you ever to be mindful of the tenor of the commanding testimonials, in relation to the efficacy of Creosote in the treatment of Dysentery.

Now, with reference to the modus operandi of this class of agents, Mr. Headland remarks—that "Certain stimulant eliminatives are employed for the purpose of checking mucous fluxes, and so far stimulate the action of true astringent medicines. Thus we administer, with more or less advantage, Aromatics in Diarrhoea; Cubebs,* Copaiba, and Turpentine in Gonorrhoea; and Balsam of Peru, and other Oleo-resins in Catarrhal affections. These medicines may act upon and pass through the glands of the several mucous surfaces which they affect; while so doing, they may stimulate the healthy function and secretion of the glands, and cause it to displace the morbid one. Dr. Williams thinks that they first cause dilatation of the vessels of a gland, and that this is followed by contraction. There is no apparent reason why the latter effect should succeed the former. But supposing contraction to take place in this way, then these medicines would be true as-

* We see that Dr. Stokes mentions Cubebs, as being a good addition to preparations of Balsam Copaiba, when used in Dysentery.
trigments. But it cannot be so, for they do not diminish any of the natural secretions, but, on the contrary, increase them. Turpentine, Cubebs, and Copaiba, are diuretics, and it is possible that while passing out in the urine they may simply stimulate the mucous surface of the inflamed urethra, and excite it to a healthy action."

And in speaking of eliminatives again, he further remarks, that "it is laid down as a rule, that they act by themselves passing out of the blood through the glands, and that while so doing they excite them to the performance of their natural function."* And as regards their ultimate, special influence over the tissue with which they come in intimate relation, whether by being applied to its surface, or by being eliminated through it—it may, for convenience, be reduced to the interpretation which attributes it to an alterative effect; for beyond this, any speculation possessed of plausibility, will subserve the purposes of explanation:—that is, "Alterative, because the manifestations of vital action are somewhat different after its use from what they were before."† Then we would say, that this class of remedies exhibit their beneficial effects by inducing a healthy change in the condition of that tissue, (when under diseased action,) over which, their influence is known to have control.

And now, gentlemen, we rest assured that we are not taking too much for granted, when we express the confidence we feel, that ere this, your minds are fully persuaded of the truth of the proposition laid down to you as the basis of the investigations just made—viz., that the rational, the successful, and therefore the appropriate treatment of Dysentery, is unquestionably to be derived from that class of remedies, which are known to expend their activity upon that character of tissue, which is involved in inflammation, to constitute the intestinal affection embraced in this disease. And we esteem ourselves most fortunate in being enabled to adduce such a weight of testimony (which we were not aware of until instituting our researches,) to maintain the stability of our position, as have been derived from the experience of others, with so many of the prominent elements of the Materia Medica, constituting this class of remedies. It but remains for us, now, to supply you with our own humble testi-

* All these italics are our own.  †Headland.
mony, in a farther substantiation of this position, with regard to another member of this class—the only one in fact with which we have a practical acquaintance in this application—the remedy, which we prefer to all others, as the safest, the best, and most efficient in its operation upon the affections of the mucous tissue in general; and which, besides being of the most general applicability in the affections of this tissue—is pre-eminently to be chosen as the agent for the treatment of Dysentery. This remedy is Turpentine!

We have dwelt to sufficient extent upon the therapeutic action of this class of agents, with an occasional reference, by way of example, to this one, to render it unnecessary to detain you with a repetition of those considerations. The Turpentine treatment of Dysentery has long been in use, to some extent, popularly, as well as with the profession; but always so complicated and obscured by other and antagonistic elements of treatment, as to have its benefits lost sight of and very soon, perhaps, to fall into disrepute in each particular case. And thus, no fixed opinion seems ever to have been entertained as to its efficiency and mode of action, and no lasting confidence has been established in its reliability as a form of treatment, until comparatively recently.

Some years ago, Dr. John Long, of Pleasantville, Kentucky, made the following statement in the St. Louis Medical and Surgical Journal, viz.—"For more than twelve months past, I have been in the habit of using Turpentine in the treatment of Dysentery, as it has occurred in this section of country, and find it to be a most valuable remedy in this often formidable disease. . . . Dose, ten drops, for an adult, every eight hours; with mucilaginous drinks and farinaceous diet. I was first induced to resort to Turpentine in the treatment of Dysentery, at the suggestion of Dr. Wood, of Philadelphia, who recommends it in Typhoid fever. During the past summer, I treated thirty cases according to the above method, twenty-nine of which recovered and one died; the latter resided fifteen miles off, and I did not see him but once." Some years ago, also, Dr. Wm. C. Brandon, of Hermitage, Georgia, through the pages of the Southern Medical and Surgical Journal, advocated the use of Turpentine, combined with Castor Oil, as a treatment for Dysentery. He says,
"My usual prescription was 1 ounce of Castor Oil with from 1 to 2 drachms of Oil of Turpentine, for an adult; diminished in proportion to the age of younger subjects. Often this dose had to be repeated, sometimes twice, before a fecal dejection could be procured. The Turpentine was left out in some instances, and my opinion is, with disadvantage to the patient. I used no saline cathartics, for in every instance where they had been used prior to my visit to the patient, I believe they had acted injuriously, especially where the stomach and small bowels were implicated to any great extent."

And this brings us to consider the Turpentine Treatment, combined with Castor Oil: as thus united it acts upon the inflamed mucous membrane, and at the same time relieves and prevents any accumulation in the fecal reservoir, the large intestine, which is the seat of this local element of the disease. And this is the treatment, of whose adoption and amendment we spoke, in our introductory remarks, when considering the "Nature and Pathology of Dysentery." And, now, we may here recall to your minds with advantage, the Third condition, existing in the nature and circumstances of this disease, with its dependent indication, viz.—Third. This mucous membrane lines the interior of an excretory canal—the seat of the inflammation—which must be kept open—it will not do to obstruct it; for besides the ordinary and necessary demands of health, that this prima via should be unencumbered, and which also has a tendency, (notwithstanding all interposed efforts,) to convey its contents onward to their exit—if, from any cause, the detritus of the process of digestion is detained within its calibre, it would become concrete and consolidated, and would act as an irritating body to the inflamed mucous lining—especially as every excited contraction of the muscular coat of this canal, would compress its inflamed lining, firmly against this resisting substance, where it would probably be held for some time, on account of the loss of normal tone in the mucous and muscular coats at this point, and

*This is a remarkable coincidence of impressions—as regards the action of salts in this disease, with our views given while considering that plan of treatment; and also has some reference to a condition in its pathology, as heretofore suggested by us—especially, as we do not recollect to have had our attention called to this article until now.
would greatly enhance the difficulty—therefore, prevent constipation.

Thus, it will be perceived, that the demands of the intestinal affection are comprised in the second and third indications, which may be treated of in connection—the latter being in this instance involved in, and forming a necessary condition to, the former—that is, whilst the mucous membrane, here, requires the treatment appropriate to mucous membranes elsewhere,—here, it is besides the lining of an excretory canal, which conveys a material of more or less solid consistence; therefore, it is also necessary to combine with that specific treatment, some peculiar method of procedure to prevent the irritation of the contained solid excrement, in its transit through the inflamed canal—since it must pass through; and this is best accomplished by reducing its consistency from a solid to a fluid state, preventing its accumulation and solidification, and also, by shielding the sore surface, if possible, with some emollient or soothing application. These two indications, then, together with derivative measures, comprise the treatment of the local or intestinal element of this disease.

Now, let us see how far these indications have been fulfilled in the following history of our experience as to this disease, with our peculiar form of treatment.

At the time we commenced the practice of medicine—10 years ago—the few sporadic cases of Dysentery which occurred from time to time, were treated orthodoxly, or in accordance with the most approved modes, prescribed by the text-book authors of the day—many of which cases (a large proportion for the few that occurred at that time), went their way, secundum artem; until Dysentery became an opprobrium to our skill—an incubus upon our peace. A year or two afterwards, when the disease began to appear epidemically, it became necessary to inquire into the respective value of the various suggestions, as regards its treatment, which emanated from different sources. If we mistake not, it was the London Lancet which first directed our attention to the Castor Oil and Turpentine method. About that time, we recollect to have been attending a case—an old lady, about 60 years of age—the worst case we ever saw, to recover. We had been called to her, two weeks after the inception of her
attack, which she said came on after prolonged constipation, and found her in that state, which the complication of age, an apparently feeble constitution, and the unabated violence of this disease, was well calculated to place her. She was on Blackberry cordial and Laudanum. The torrina and tenesmus were exceedingly violent, the stools very frequent, imperative, irresistible, and of a purulent character. Altogether, "passing away"—as we thought—was impressed visibly, upon every feature of this case. . . . "Why hadn't she died?"—thought we, as enormous quantities of opium and astringents failed to make any impression on her disease.—"Why doesn't she die?"—was the inquiry presented to our minds, when the slightest quantity of salts purged her almost to death, without abating, perceptibly, the affection of the large intestine.—"Why can't she die?"—was the pitying interrogation, when she continued to vomit small doses of the simple Castor Oil and Turpentine, without any relief to her excruciating sufferings. It then, first occurred to us, to saponify the Oil with Soda; to mix in the Turpentine; to suspend these in an emulsion of Gum Arabic and Sugar; and to add some Sedative or Anodyne, (which did not contain opium); as well as some Aromatic, to cause it to be retained by the irritable stomach. The following Recipe was the result—viz:

B. Castor Oil, . . . . . . 3 ij.
Bi-Carb. Soda, . . . . . . 3 j.
Spts. Turpentine, . . . . . 3 ss.
Powdered Gum Arabic, . . . . . 3 j.
Loaf Sugar, . . . . . . . 3 j.
Compound Spts. Lavender, . . . . 3 j.
Camphor Water, q. s. to make 8 oz emulsion.*

Flavor with oil of Peppermint or Lemon.

Of this, she took 1 tea-spoonful every two hours, and the dose was gradually increased to 1 table-spoonful, as her stomach was

* Some of the ingredients in the above recipe may be altered, occasionally, with advantage,—for instance, Sweet oil may be sometimes substituted for the Castor oil; and the proportion of Turpentine may be varied according to circumstances. The Spirit or the Oil of Turpentine may be used indiscriminately.

About the time we commenced using this recipe for Dysentery, we found that the same formula, with the Castor oil left out, was an excellent mode of administering Turpentine in Typhoid fever, and have used it ever since.
able to bear it; for, after making an effort to retain the first
dose, the irritability of her stomach seemed rapidly to subside.
And very soon—being confident of the opposite result—we were
astonished to see the marked improvement in the condition of
the patient—who, upon this treatment, steadily advanced to
recovery—for verily, "her time had not yet come!"

This Recipe, Gentlemen, has constituted the basis of our inter-
nal treatment of the local affection of Dysentery, ever since—
and we have never since found cause to set aside that basis—as
it has never yet, forfeited the confidence, thus engendered in it.

We would call your attention to some of the principal ele-
ments in this formula, and their probable effects under these
circumstances, to determine how far they rationally fulfill the
two indications under consideration.

Now, it will be recollected that, in a former Lecture, we en-
deavored to show, that there were four elements or conditions,
making up the sum of that form of disease which is termed
Dysentery, and that, from these, necessarily proceeded the four
consequent indications of treatment.

First.—The existence of Fever, dependent upon a cerebro-
spinal condition—which was probably the origin of the Dysen-
tery—demanding the prevention of that fever. Conse-
quently, on a former occasion, we dwelt to some length, upon
the great importance—yea, the indispensableness, of giving
Quinine, as the appropriate remedy for answering this first indi-
cation, which, together with revulsives, constitutes the treatment of
the cerebro-spinal element of this disease.

Second.—There being disease of a mucous membrane—re-
quiring its own peculiar treatment, the action of Turpen-
tine was sufficiently considered, as an appropriate agent, for
supplying this second indication, and need not be, here, reverted
to.

Third.—There is Constipation existing and having a tendency
to persist—being an element of the disease and an obstacle in
the way of its relief, (because the retained, inspissated contents
of the canal, constantly irritate the sore surface of the interior
lining of that canal, over which it must pass)—therefore, the
third indication was, to relieve and prevent Constipation.

Now, let us examine into the appropriateness of some of the
other elements in the formula which we have given you, and which are combined with the Turpentine, for the fulfillment of this third indication.

Castor Oil, it is generally accorded, acts principally by lubrication—i.e., by anointing the interior surface of the intestinal canal and allowing substances to pass the more easily over it. It is also admitted, that it acts as a mild stimulus to the intestinal mucous membrane, inducing mucous stools—and for this reason, it is thought principally to act upon the large intestine, as this is the characteristic excretion from this portion of the canal.

The effect of the Soda, which is here combined with the Oil, would probably be, first, as a solvent of the faecal mass, and if given in large doses, it acts as a laxative. So, may it be perceived, that the two combined, would probably have the effect of overcoming the constipation by their laxative effect, in an inoffensive manner—assisted, if necessary, by exciting the biliary secretion with the preparation of Mercury, (viz., Blue Mass and Chalk—1 part of the former to three of the latter,) of which we have spoken, as the one we preferred to all others, when the obstinacy of the constipation, as well as other indications of suspended hepatic secretion, demanded its employment. These, together then, may be considered the appropriate treatment for the relief of this condition, in answer to the third indication.

Some of the secondary effects of the Soda may be considered of much benefit in this disease. For instance, in connection with Turpentine it proves a most powerful diuretic, and perhaps advantageously, as it is known that in all fevers, the secretion of this great emunctory is more or less suspended. And if the opinion be correct, which has long been entertained, that in all fevers, there is the generation or formation of zymotic elements in the system, from the more rapid disintegration of the tissues owing to the consequent over-wrought condition of the whole organism in that state—the effect of these two powerful diuretics, as combined in the formula, should serve the valuable purpose of their elimination from the blood, by the urine.

And further: May there not be some advantage in the alkaline quality of this agent, which may tend to counteract that state of the fluids of the body, which is favorable for the development and maintenance of that condition, in an important
portion of the organism, from which results the manifestations of this disease? This opinion does not seem so "far-fetched," when we are able to refer you to an interesting article, in the Dublin Journal of 1848, with the very pertinent caption of "Alkaline Treatment of Dysentery"—which is too long to quote entire, but where the author* says in relation to one of his cases there reported, "The feature of most importance in this case was the almost magical effect of the alkali in allaying the tor-
mina, tenesmus, and purging, the tincture of Opium appearing to exert no influence whatever over the disease till combined with the liquor Potassæ; the patient remarking, when I visited him in the evening, that the last medicine produced a feeling of ease and rest from pain quite cheering to him." The writer had administered 10 minims of the liquor Potassæ every se-
cond hour, and applied Turpentine to the abdomen. He also mentions Soda as one of the alkalies used.

In several cases, wherein the simple Oil and Turpentine were administered, we have to state, that we did not see such very remarkable results manifested, or so promptly, as from the exhibition of the Emulsion. One of these—a very bad case—having been treated by a friend, in the former manner, (when, during his sickness or absence, the case fell into our hands,) was signally benefited by the change to the Emulsion, and pretty soon recovered.

The Lavender is used here as an anodyne or sedative, devoid of any constipating quality—yet, having amply sufficient power to allay, in a remarkable degree, the nervous irritability and agonizing pangs, consequent upon this torturing disease, by its anodyne or sedative influence without a narcotic effect. We are aware that this medicine is pretty generally disregarded, as of no force, and that it has been consigned to a place among that class of medicinal agents, contemptuously designated "Old Women's Remedies;" but it is our opinion, that this class of our race, are often the venerable conservators of important, though obsolete, medical ideas, as well as valuable, though discarded, medicinal agents—and of such, we consider the one in question. There is in reason no foundation for an objection to this assertion, on the score of "impossibility," in reference to its activity—as the

* D. Kelly, L. A. Mullinger.
potent narcotic itself, is but the product of a plant, and that, a comparatively delicate and succulent one; and where is the sense of denying to this plant, the credit of its own powerful virtues?—We do not pretend to say, that their effects agree in kind, but we have long been of the opinion, that the importance of this agent, has been very much overlooked. It has been long in use for "nervous irritability," "palpitation," "hysteria," &c.—and with good reason. We contend, that it might have served a valuable purpose, in a more extended application, and with more decided evidences of its power:—as, for instance, for the purpose of diminishing the irritability of the nerves, consequent upon the effect of other causes and in other localities of irritation. For we know, that under the operation of such causes, its continued use has, under our observation, been attended with remarkable results, which have led us to indulge in the projection of an hypothesis, in relation to its therapeutic action, as compared with that of opium. It is this, that while opium seems to act upon the central portions of the nervous system, as well as the peripheral portions, but more especially upon the cerebral mass, inducing a suspension of the functions of this organ, in somnolence, coma, &c.—this other plant, may exhibit its therapeutic properties, by expending its obtunding influence upon the nerves, and, perhaps, the spinal cord, (their more immediate termination,) without affecting the brain: or, perhaps its influence is of a totally different character, and may not be manifested in similar results.

This is but a theory, concocted for our own satisfaction, in explanation of the valuable facts, connected with the exhibition of this remedy—and whatever be their philosophy, we deem the facts have been sufficiently evident to be worthy of remark.

The tranquilizing effect, which has been generally accorded to this vegetable principle, in ordinary doses, is but a moiety of the almost paralyzing sedation it is capable of inducing, when frequently repeated, or administered in sufficiently large doses. That property would seem to be almost identical with that of Valerian, and is displayed apparently upon the same portions of the nervous system. The tranquilizing power of the latter agent, is plainly to be recognized, in its marked control over the subsultus tendinum (if not extreme), of Typhoid fever.
Really, many practitioners seem to have a proclivity for reducing the practice of medicine to a very simple process—viz., the application of a very limited number of medicinal agents—by selecting one (the most potent, perhaps,) from each class of remedies, and for convenience, striving to force its application, under all circumstances, when the demands of all of these circumstances, are alone able to be fully supplied from a whole class of therapeutic agents—each agent, probably, being adapted, from the peculiarity of its properties, to meet one or more of the varying phases or stages of pathological condition, which may occur in any organ or system—all which, go to make up the manifestations of disease, occurring in any particular organ or set of organs, and, perhaps, requiring the employment of the whole of that class of medicines, which is known appropriately to belong to that organ or system.

We might adduce numerous instances of the most unmistakable and powerful effects, attendant upon the administration of the Lavender, as forming an ingredient in the formula, above given you, but one or two will suffice for illustration. For example: Mrs. V., an intelligent lady, residing in this place, during a very severe attack of Dysentery, in which tenesmus were excessively harassing to her nervous system, after taking the Emulsion every three hours during one day, was entirely relieved of her dysenteric symptoms, but complained bitterly of the paralyzing effect of the "Laudanum Mixture," as she called it—saying that, she could not take any more, that she "could scarcely raise her hand," and "felt such a calmness and lassitude, that it was distressing" to her. It is a common thing for patients to call the Emulsion, the "Laudanum Mixture," or insist that they had been taking Laudanum, from the marked relief they experience; and yet, without being particularly disposed to sleep—their mental faculties being altogether unembarrassed. Again: for example—our estimable friend and your erudite Professor of Physiology, Dr. Miller, stated to us, that on one occasion he was required to administer to a case of violent cramp-colic, and there being no other medicine in reach, he gave the patient from two to three ounces of this Emulsion, and he was entirely relieved, with an astonishing promptness. This marked and sudden effect, we could attribute
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to no other element than the Lavender, acting as a powerful anodyne, in such quantity. This is an effect pre-eminently called for in the nature of Dysentery, and most remarkably appropriate for its accomplishment here, is this agent, which is devoid of a constipating quality.

The Gum Arabic in the formula, would probably have, only an emollient or soothing effect upon the inflamed mucous surface, as it may be considered proven—by the experiments of Bous-singault, and others, upon fowls, and of Dr. Wm. A. Hammond, Surgeon U. S. A., one of the Prize Essayists of the American Medical Association, in May, 1857—by experiment upon himself—that this gum, as well as others, are entirely indigestible—the whole quantity in weight, within a bare fraction of that ingested, being collectible from the alvine discharges.*

Now, Gentlemen, having considered the three first indications, and also having determined their appropriate requirements, as regards internal medication, we have but to refer to an important aid for the relief of the intestinal inflammation—viz., that of derivative measures.

We stated before, that if the inflammation existed anywhere in the course of the ascending, transverse, or descending colon, it might generally be detected by manual pressure along the extent of that organ; but if in the rectum, its situation was to be inferred, from the violence of the tenesmus, as well as (when used) the intolerance of all enemata. Then, the application of a blister, cupping, or leeches, over the tender part, when situated in the colon, will be found to be a valuable adjuvant in the treatment. We have generally used a small blister, the size of the hand, in the more violent cases. This may be kept open, with advantage, by poulticing, until the symptoms of the disease subside; or may be placed, alternately, over different portions of the canal, which are found, upon examination, to be affected. We would deprecate the barbarity of blistering the whole of the front surface of a man’s body, in order to reach the small portion of surface corresponding to the extent of inflamed structure, in the interior. When the disease exists in the rectum, a blister applied to the sacrum, will very readily influence it, on account of the anatomical position of that organ. We have thought that

a blister to the sacrum proved the turning point, in an extreme case of this kind, where tenesmus was the prevailing symptom.

We would now notice briefly the requirements of the Fourth condition, and its consequent indication of treatment, viz:

Fourth. There is a state of exhaustion, or, more properly, Fatigue—Regular rest and resuscitation of strength are to be secured to the patient—by whatever means attainable, provided they can be reconciled to the three other obligations to be fulfilled—in order to indemnify his vital energies for the effect of the harassing influences preying upon them.

The vast importance of rest, or relief from the racking and consuming torture, which we sometimes witness in this disease, should be constantly kept in view, or the patient will often sink from exhaustion of the vital forces, through neglect in this important quarter. We once saw a patient treated on the saline plan, which failing to relieve him, he got no rest at night, and grew worse every day—until he was allowed some Morphine at night—when he slept and appeared much refreshed and revived the next morning. The Oil and Turpentine Emulsion was now substituted for the Salts, when he rapidly recovered.

A patient with Dysentery should, at all events, be secured his accustomed rest at night, by every possible means, that he may have the great advantage, so imperatively demanded, and so essential to his well-doing, here, of the compensation for the damage done during the day, by sleep—

"Tired nature's sweet restorer, balmy sleep."

And here is the only appropriate place, which opiates can occupy, in the treatment of Dysentery. With this object, we prefer the administration, by enema, of $\frac{1}{4}$ to $\frac{1}{3}$ gr. of sulph. Morphine, in from 1 to 2 ounces of cold water, (as the least irritating preparation,) every night at bed-time; which may be repeated, if necessary, until sleep is induced. It will be perceived that there is no danger of restoring the constipation, under these circumstances, so long as is kept up during the day, the unremitting application of the other element of the treatment, embraced in the exhibition of the Emulsion.

The patient's strength should also be supported by nourishment, such as beef essence, chicken soup, corn-meal gruel, etc.;
for, until the latter stages, generally, the stomach and small intestines are capable of performing their function of digestion. After an attack of Dysentery, it may be of importance to instruct the patient to select such articles of diet, as will be favorable for preventing constipation, and the consequent re-establishment of the disease. Ripe fruit, if in season, will prove often an agreeable, harmless and very efficient laxative. We remember the case of an old lady, about sixty, who, after a very severe and prolonged attack of Dysentery, and even before she had entirely recovered, regularly ate a canteloupe every day, which she continued until the season was over for them—her physicians, who allowed her the indulgence, recognizing the fact, that the fruit could do no harm, as the upper portion of the canal, was not the part involved in this disease.

Now, Gentlemen, we have seen the full consummation of the four indications, which we derived, from the study of this disease, in accordance with our plan. We will very briefly recapitulate the four cardinal points of treatment, as if in connection with the management of any particular case.

1st. Give Quinine, in sufficient quantity, and often enough, to break up the paroxysmal character of the disease. Also apply sinapisms, or cupping, or a blister to the spine, according to the severity of the case, or the degree of spinal irritation present.

2nd. Commence immediately, and give the Emulsion, every hour, or every two, or three, or four hours, according to the severity of the symptoms; for the more intense the symptoms, the more often is it to be given, until they are relieved. If the stomach is delicate at first, commence with 1 tea-spoonful, and gradually increase it to 1 table-spoonful, the ordinary dose for an adult; but give the Emulsion in every case, whatever may appear to be the obstacle—and continue to give it, until the patient is quite well, diminishing the dose, or increasing the interval, as he recovers.

3rd. If the constipation has been of long standing, or is obstinate—probably, from want of action in the liver, as manifested by the yellow-furred tongue, tenderness on pressure over the right hypochondriac region, &c.—give from 10 to 20 grs. of the Blue Mass and Chalk, or moderate doses of Calomel or Blue Mass—though we prefer the former. Also, apply a blister,
when the case is of sufficient severity, over the diseased portion of the canal, to be kept open, or repeated, if necessary.

4th. If the patient does not sleep at night, give from a quarter to a half grain of Morphine, in cold water, by injection into the rectum, at bed-time every night, and repeat if necessary—also have regard to supporting his strength with nourishment.

Such is the treatment which we have practiced, in every degree of Dysentery, from the time of our first commencing the use of the Emulsion. And so anxious are we to do justice to a measure, in which we have such unbounded confidence, that we hope you will pardon us for introducing, here, some evidences of its successful application, which are partly derived from our own experience, and have partly come to our knowledge from its employment by others.

Should we endeavor to establish its value, by all the testimony we could furnish, it would be in effect, but the record of every case of Dysentery, which has occurred within that time, in our practice, as well as that of your Professor of Anatomy, our brother and associate, with the exception of but two, if our memory serves us, which did not terminate fortunately—and which probably owed their result to the existence of a more serious complication.

But where is the necessity of forcing this testimony from the result of our own experience, when all this evidence can be furnished from the practice of our professional friends, whom we have induced to adopt this mode of treatment, many of whom have been long in practice, and are occupying such positions as will command for their medical dictum, that confidence which admits of no incredulous gainsaying. Many, in this place, have adopted this plan; and in various portions of this, and the adjoining States, there are those, who have for several years used, and are still using this, as their only treatment for Dysentery. A friend in Alabama, who has an extensive practice, informed us recently, that since receiving our letter, recommending this plan, he has treated all his cases accordingly, and although he has passed through a severe epidemic of this disease, has not lost a single case.

Another, in this State, remarked to us, that the overseers on the plantations, within the range of his practice, thought it
necessary, often, only to send to him for a large quantity of the Emulsion, on the occurrence of several cases of Dysentery, on their places—thus, saving him the trouble of attending. From this, it may be judged to be a safe practice.

And again: we have it from the most reliable authority, that a druggist of one of the cities of Georgia, stated, that he had prepared and sold during an epidemic of Dysentery, sixteen gallons of the Oil and Turpentine Emulsion, according to this formula; and that in this region, it had been peddled about the country, as a secret remedy in this disease. And here, gentlemen, we would acknowledge, that it was as much the wish, to rescue this compound from so illegitimate a prostitution and foul perversion of its original design, as anything else, that suggested to our minds the propriety of making it more generally known—and to this end, has it claimed your attention.

It now remains for us, but to notice that condition into which Dysentery often runs, unless timely arrested, and to which we called your attention in the latter part of our Lecture on the Pathology of this disease—wherein, as we said, the irritation of the disease in the large intestine, having been reflected for so long a time, upon the upper portion of the prime vitæ, we see, in addition to the purulent or bloody evacuations, a continuous and wasting Diarrhœa. Higher up, the stomach becomes involved in some instances, and there are loss of appetite, nausea, and vomiting even of the blandest fluids—together with a red, dry tongue, quick and feeble pulse, entire prostration of strength, cold extremities and dullness of the mental faculties. And thus, the vital spark grows dim, flickers and goes out, unless again rekindled by its appropriate stimuli. The nervous system having been over-wrought, loses its excitability—becomes paralyz ed. The mucous membrane of the large intestine, having been racked and bruised, remains a passive, purulent, secretory surface.

And further—that, in this entire metamorphosis, the characters of the original disease have disappeared. It is not Dysentery, and requires a change of management. It is not Typhoid Fever, as shown in its history, and as is manifested, often, by the sudden and almost miraculous recovery of cases, upon the application of its appropriate treatment.
We can best illustrate this condition and its character, by the brief report of the following case—with the facts concerned in the history of which, several of our professional friends, in this place, are perfectly familiar—viz:

One of our professional friends, on leaving the city, to be absent a few weeks, placed several patients in our hands, and among them, Philip—a spare-made mulatto boy, about 20 years old, the property of Mr. H—, stating, that this patient was in the last stage of Dysentery, and would not long trouble us, as he was moribund.

We found him—in complete prostration, with a quick, almost imperceptible pulse, red and dry tongue, cold and tremulous extremities, mental faculties very obtuse, and occasionally wandering and muttering; also, passing watery discharges, with some pus, involuntarily, and with his stomach rejecting every thing, apparently without effort.

This case had had the full benefit of the Saline treatment.

We prescribed—Brandy, to be repeated, until his stomach retained it, and then to be continued without limit. Also, whenever it was apparent that he had had a discharge from the bowels, he was to take, by enema, $\frac{1}{2}$ gr. Morphine in 1 oz. cold water; and per orem, 5 grs. Bismuth (sub-nitrate) in a spoonful of cold water. Besides, whenever his stomach could retain it—Beef essence and Rice gruel, freely.

Being now, called away and detained in attendance upon the wife of a particular friend, we heard nothing from Philip, until about ten days after our visit to him, when we wished to be satisfied of the result, and also thought courtesy to our professional brother required us to go and express to the boy's owners, our regret for their loss, &c. On reaching his room, we found it swept out, his bed made up, and a hat lying in the floor—unmistakable evidences, to us, of the reality of our inevitable convictions. We went to his mistress, stating, that we were sorry at not finding the patient where we left him, but really expected nothing else, &c. When, without appearing to appreciate what we were saying, or even hearing it, she interrupted us with the interrogation—"Doctor—have you seen Philip?"—Imagine our great astonishment, when she continued to say—"He was sitting on the steps, but a few minutes ago—I
And so he had, and continues to walk out and in, to this day.

And here, Gentlemen, you may take a precept, from the memorable injunction of the heroic Lawrence—"Don't give up the ship!"—So, never abandon the frail craft of humanity, though all the machinery of its proud organization, be o'er-done and disabled, with battling against the unequal violence of tempestuous disease!—Don't give up this ship—though left a wrecked and powerless victim of the storm's furious rage, drifting headlong toward the boundless ocean of Eternity! No—never give up the wreck—so long as there is any evidence, of a human life within it—for God may bless your efforts!

And now, Gentlemen, in conclusion, having labored to convince you of the fact, that there is an Appropriate Treatment of Dysentery—we hope that you will never be deceived—"by the occasional brilliancy of a few surprising cures, which dazzle the minds of men, and blind them to those innumerable instances of failure, which ought to teach them the madness of confiding in a practice founded upon no rational principle, and conducted upon no consistent plan."

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ARTICLE VIII.

A Case of Empyema, treated by Injections of Water into the Cavity of the Pleura. Reported by Sternes De Witt, M. D., of Baker county, Ga.

When I first saw the case, the patient, which was a girl, aged sixteen, had been sick for four weeks—was very feeble and much reduced in flesh; pulse quick and weak; had some fever; was very restless, could lay no other way than on her left side; breath very short and quick. According to the best information that I could draw from her parents, she was taken with a chill after being on the road on a journey five or six days. She had been confined to her bed for four weeks—had been laboring under febrile symptoms, and had cough, which grew worse; had

* Hamilton—History of Medicine.
spit some blood. She had felt considerable pain in her left side, which was in the wall of her chest, rather than deep-seated. After two days, she had in that locality considerable swelling, which, in two or three days, had increased to a remarkable extent, reaching as far as the sternum. On one side, and filling completely the cellular tissue, around to the spinal column on the other side. This, however, did not much alarm the parents. In the lapse of about four days more there had formed over the false ribs, an abscess about the size of the top of an ordinary coffee-cup, having the appearance of an enormous boil. This was the state of things when I first saw the patient.

On examination, I found that the upper swelling was very hard; and at about the third intercostal space the motion of the heart could be seen at a distance of several feet—the movement communicated to the chest, extending over a space of 3 or 4 square inches. My attention was next called to the tumor, lower down, which, as I have said, was on the false ribs. This felt hard, did not fluctuate, was very red, with little tumefaction around it, except in the upward direction; here I could hardly be satisfied that there was any connexion between the two, as the swelling was diffused from the axilla half way round the body in either direction, and nearly down to the false ribs, on which was situated the pointed and more determined tumefaction.

Being inexperienced, and having never seen a similar affection before, I told the parents I would see the case on the next day, having determined to operate on the lower swelling, as I had no doubt it contained pus; thinking that it could have no connexion with the difficulty above, and suspecting the upper swelling might, possibly, be an aneurism, of which I knew nothing by experience.

The abscess, which I had determined to open, had by this time got considerably softer and less inflamed. I made an incision about three-fourths of an inch long, down to the pus, which flowed freely for several minutes. In the meantime, I had noticed that the upper tumor had wonderfully abated, and the breathing had become easier. The matter was quite thin, and darker colored than ordinary pus; this continued to run from this opening until the swelling above was almost entirely gone, I inquired into the state of the patient's bowels, and found that
she had not had a passage for several days; I gave her a gentle cathartic, and directed a poultice, which had been used hot, to be applied cold.

I returned on the second day after; the matter had ceased to be discharged, and the swelling had increased above, almost as much as at first. On examining the lungs by auscultation, I found that the patient did not breathe at all in the left side, and that the other lung was laboring under great compression—nearly as much so as when I first saw the case; pulse feeble, with some fever.

The next day, I saw the patient: the swelling had become as large as at first, and the breathing very difficult; the pulsation in the tumor as apparent as before. I immediately decided to let out the matter; which I did, by making an opening in the centre of this pulsating tumor, three-fourths of an inch long. The matter flowed in a large stream with such force as to jet from the body several inches; this time it did not discharge less than two quarts of matter in five minutes, and continued to discharge slowly for several days. In the meantime, I bandaged the body and placed a plaster over the opening to prevent the ingress of air, removing the same every day, with the patient reposing on her knees and breast, thereby aiding the discharge of matter, which was materially facilitated by the introduction of a small tube through the opening, to expedite the escape of the matter, which continued to discharge one or two ounces per day for several days, which discharge did not abate as rapidly as I had anticipated.

I prescribed Iron by hydrogen, three grains, three times per day. The patient improved, grew stronger, ate heartily, but still the discharge did not abate; the lung did not expand on the left side, breathing confined entirely to the right side; left side seemed to lack its fullness, and the spine was flexed laterally, the concavity on the affected side. I now tried injection, first preparing two quarts of tepid spring water, and with Matson's patent injecting instrument, introduced two or three inches into the opening—threw the entire quantity of water prepared, into the chest, it escaping around the nozzle of the instrument, after the cavity was full; thus effectually washing out the part. I afterwards bandaged the body as tight as the
patient could tolerate it, applying an adhesive plaster to the opening, and permanently closing it. After this, loosening the bandage daily.

On this treatment, the lung began to expand, which continued until the function of the lung was entirely restored. The opening cicatrized, and the patient was discharged, apparently well.


The assemblage of symptoms which, in the course of certain Typhoid fevers, are manifested on the part of the respiratory apparatus, known as predominant phenomena, constitutes, by common consent, one of the most serious forms of these affections. Observed separately in each patient, this form can show itself under an appearance more or less distinct, and thus evince, not an epidemic, as it has been too often called by an abuse of the word, but a peculiar physical constitution. If it is desired to study attentively the circumstances in which these sorts of constitution are developed, it would be easy to demonstrate, I believe, that in the larger number of cases these pathological manifestations, thus attributed to a certain number of individuals, ought to be classed among constitutions influenced by season, upon which the older physicians insisted so justly, and the study of which has been perhaps too much neglected in later times and even at present.

But it is not with this part of the question that I wish to occupy myself here; the part upon which I propose to insist, relates to the thoracic form of continued fevers, and is more immediately practical. I desire to call attention to a mode of treatment which has yielded the most satisfactory results in the cases in which I have put it in use, and which has equally well succeeded in the hands of another hospital physician, my friend, Dr. H. Bourdon, to whom I had mentioned it. It is the application, in great numbers, of dry-cups upon the thoracic parietes, and also, and especially, upon the inferior extremities. It was in reflecting upon the following observations that I was led to the trial of this means: experience has since demonstrated its efficacy.
The thoracic phenomena which may be observed in typhoid fever are of a peculiar nature, of which it is necessary to render an exact account. Exclusive of cases, very rare however, in which a phlegmasic complication, a true pneumonia unites itself to the primitive pathological element, the disorders that are manifested in the pulmonary organs, are nothing less than a congestion analogous to that which might occur at different parts of the surface. These wide surfaces, of a sombre red, not painful, presenting no augmentation of heat, which may be observed at diffused points of the skin in subjects attacked by typhoid fever, and which sometimes occupies the arm or forearm, sometimes the face, the nose or cheeks, can, it seems to me, explain the mechanism of pulmonary congestions which are found, but with a variable degree of intensity, in all the subjects attacked by this disease.

They offer, as cutaneous congestions, the passive character; even the weight plays a part in its development, to which the attention of pathologists has been called for a considerable time. These congestions answer, in effect, to that which has been designated at first under the name hypostatic pneumonia, a designation which Prof. Piorry has since modified into that of pneumonia hypostatic. At the present time, nothing more is seen in these states of the lung than a phlegmasia of the parenchyma, a veritable pneumonia. The diminution of sound observed on percussion, in almost the whole of the chest behind, and which is not enough to constitute a true dullness ("matilé"), the rudeness of the "bruit respiratoire," which is far from being a bronchial souffle, the more marked distinctness of the voice, which does not amount to broncophony, and the mucous or subcrepitant rales which persist without offering the true character of the crepitant, and without passing to the bronchial souffle; all these signs, I say, indicate plainly a certain augmentation of the density of the luug, but cannot suggest the idea of a true hepatization. The anatomical examination itself establishes clearly the order of lesion to which these signs correspond, and it would now be awkward to consider as a proof of a phlegmasia of the pulmonary parenchyma, the dark red colour of this tissue, even after observing that the lung does not contract upon the opening of the chest, as does the lung in a healthy state; that it is a little more friable, that it does not crepitate under pressure of the fingers, and that it sinks in a vessel of water, instead of swimming upon this liquid when a small part is subjected to this proof. Insufflation, in fact, renders to the lung thus modified, a part of its normal appearance, which is impossible in the truly inflamed lung, and shows clearly that if the lung is densified by the determination to, and stasis of, a sufficiently considerable quantity of blood, there is not in the substance of its tissue any
effusion of a plastic nature, the only anatomical character of a phlegmasia. Besides, in a case of simple congestion, a direct inspection of the incised surfaces permits the recognition of the different elements which compose the pulmonary parenchyma—elements which, in inflammation, are no longer perceptible, agglomerated and confused as they are by the plastic infiltration which determines the phlegmasia.

M.M. Legendre and Bailly, in insisting upon these distinctions, have assuredly rendered a great service to the science.

The pulmonary lesions observed in typhoid fever, are then, the result of a simple congestion, of little intensity in some patients, very violent in others, either on account of individual disposition, or of a more general influence. This influence may even add another element, and in some patients, it is perceived that to the congested state mentioned, is added an affection of the bronchiae, a kind of capillary bronchitis of which the finer rales, and the expectoration of puriform sputa, of almost miliary form, with dyspnœa as the most prominent traits. One of the patients that we have observed, and whose history we give further on, (obs. 6,) offered an example of this complication. When it exists, this catarrhal bronchitis, as it has been called, is a new cause of a more considerable congestion in the pulmonary tissue; it there exaggerates the already existing disposition.

It is when this congestion takes a considerable development, whether or not it be exaggerated by the bronchitic element I have indicated, that the signs of a pulmonary asphyxia appear—signs, the augmentation of which is rarely rapid, but ordinarily gradual. Among these signs should be mentioned the anxious aspect of the face, the bluish coloration of the cheeks and lips, dilatation of the alæ of the nose, more marked dyspnœa, which, however, hardly ever increases as far as a state of orthopnea; it is then that the rales are multiplied in the chest, and a danger which is immediate and often very difficult to remove, menaces the patient.

The therapeutic indication in such a case is, then, to free the lung of blood which flows to and rests there, and serves to render this organ too passive to expel the liquids which obstruct it, on account of the elasticity which it has lost and which is necessary to the integrity of its functions. Blood-letting, often practiced in like circumstances, removes from the pulmonary tissue a part of the venous blood which accumulates there, but it cannot, on one side, be pushed very far without inconvenience to the general condition of the patient, always under the influence of an adynamic tendency; and upon the other side, in drawing from the patient a part of his strength, these blood-lettings tend to augment the passive condition of the lung.
These considerations should tend to banish from practice, in such cases, the use of sanguineous abstractions—even the local. It has been sought again, to fulfill the indication by disengaging a part of the bronchiae of their mucosities, by the use of emetics, at the same time that tonic preparations, especially those of cinchona, aid in sustaining the advantages obtained with the aid of the concussion produced by vomiting. This treatment is assuredly reasonable, but it ought to be limited. Struck with the insufficiency of these means, I have sought to aid them, and, in considering the mobility of cutaneous congestions in persons laboring under an attack of this disease, convinced, above all, of the congestive nature of the pulmonary disorders, I found myself forced to discover a means of disgorging the lung—a means not borrowed from a spoliative therapeutics, and only a simple means of displacement.

I at first thought of employing the Junod cup; but besides its never being procured with promptness in our hospitals, it has the inconvenience of easily producing syncopes, accidents which might be attended by the saddest consequences in the patients we have to treat. It was then that I attempted the application of dry-cups, placed in considerable numbers on the chest, and particularly upon the inferior extremities. I have gone so far as to apply on one patient from 60 to 80 of these cups, morning and evening. The evening application is necessary, for opposing the return of the congestion removed momentarily by the derivation already exercised in the morning; and this tenacity of action is not too much against a disposition equally tenacious. Under the influence of these cups may be observed very large ecchymoses, which are formed in the places where the cups had been placed. These ecchymoses persist during a time more or less long, but I have never seen them followed by any accident whatever, although upon some patients the number of cups has been more than 500 in ten days. Never have I seen gangrene, nor even suppuration, against the presence of which evils I have always prepared myself, especially in my first trials of this means, which was two years ago. I desired to wait some time, and to multiply experiments, before publishing the utility of this mode of treatment.

The following facts will serve as examples in confirmation of what I have advanced:

Observation I.—Typhoid Fever, of the thoracic form, in a young woman; emetic; 120 dry-cups in three days. Cure rapid.

Nickley (Sidonie), 20 years, a servant, unmarried, habitually well regulated, has never borne children, has never had any other disease than the measles. Actual affection commenced May 12th; its accession was slow; the patient had pain.
in the head; strength diminished; at the commencement she had a slight diarrhoea and a little cough; difficulty of respiration during several days. She has had no treatment, and has not even remained in bed until her entrance into the hospital, the 20th May, 1855.

May 21st. 104 pulsations per minute, pulse small, tolerably hard; skin hot, face red, cheeks and lips bluish; eyes prominent, humid; extreme difficulty of respiration; sound of the chest normal; mucous and sonorous rales very abundant on both sides, especially at the base of the lung behind; tongue a little shining; loss of appetite; abdomen slightly enlarged; gargouillement in the right iliac fossa; no diarrhoea; some rose-colored lenticular spots disseminated upon the abdomen and lower part of the thorax; head heavy; great muscular debility. Prescription: 15 grs. pulv. ipecac; sinapisms upon the inferior extremities.

May 22nd. Has vomited well; two stools; 112 pulsations, small; extreme difficulty of respiration; sound of chest less normal, without real matité; expectoration of white mucus; some rales in whole extent of the chest; face and integument of the hands still violet; she breathes better in the almost sitting posture she has been made to assume. 15 grs. ipecac, 40 dry-cups upon the thorax.

May 23rd. Abundant vomiting of colorless mucous matter. Oppression has greatly diminished since the application of the cups; the skin is still of the same dark red color; headache less; abdomen soft; skin cool; has a little appetite; 110 pulsations, small and hard. 15 grs. ext. cinchona, 40 dry-cups.

May 24th. Sound of the chest perfect; still a few rales at the base behind; pulse small, sufficiently developed; skin cool; face less colored and less anxious; she regains her natural expression. 40 dry-cups, lichen two portions, 23 grs. ext. cinchona.

May 25th. From this time the patient does well; appetite has returned; the skin and mucous membranes lose their violet hue; the respiration is natural; abdomen soft; bowels quiet; no more headache; and the 3rd June the patient eats her full allowance.

This observation offers, at the same time, an example of the predominance of thoracic phenomena, and the rapid effect of dry-cups applied in great numbers. The thoracic form was so plainly the predominant element, that once this order of accidents was removed, convalescence was rapidly established.

Observation II.—Typhoid Fever, with adynamic state—predominance of thoracic symptoms; 4 cups (scarified); 160 dry-cups; extract of cinchona; cure.

Jetté (Francois), 28 years, brick-layer, enters hospital Oct. 16,
1855, "Salle Beaujon," No. 62: Says he had the same disease five years since; remained about two months in the Brick-layers ward, "hospital Beaujon;" has lived at Paris since he was 8 years of age. For the last fifteen days has kept his bed without calling a physician or doing anything for himself; has had severe diarrhoea—no epistaxis. This period had been preceded by a state of general debility and occasional giddiness, which, however, still permitted him to work.

Oct. 17th. 120 pulsations, pulse small; skin hot; violet color of the skin, especially of the face and extremities; lips violet; nares dusky; abdomen tympanitic, numerous lenticular rose-spots; diarrhoea considerable; tongue covered with a grayish coat, very thick; trembling of the tongue; difficulty of speech; no headache; cough frequent, without expectoration; in the whole extent of the chest, an abundant rale presenting a mixture of the sibilant and mucous rales; no absolute matilé; sonorousness is only moderate in all the chest, posteriorly; want of sleep; agitated during the night. Ext. cinchona 7 ½ grains, 4 scarrified cups on the chest.

Oct. 18th. Restlessness during the night—104 pulsations; skin hot and dry; tongue trembling; abdomen tympanitic; gar-goullement in the right iliac fossa; violet color of the integument; troubled respiration; conjunctiva injected; same state of the chest on auscultation and percussion. Julep, with ext. cinchona 30 grains; 30 dry-cups on the chest; bath in the ward; beef-tea twice.

Oct. 19th. The cups have considerably relieved him—they have left on the chest spots of deep red color, with no trace of vesication; tongue trembling, still covered with a thick coat, but not completely dry; nares dusky; diarrhoea abundant, involuntary; agitation, no sleep; the cough is less, rales a little less abundant. Julep, cinchona 10 dry cups.

Oct. 20th. 103 pulsations; skin cool; desires to eat; disseminated rales heard in the chest; cyanosis of the face is less intense. Julep cinchona, 10 dry-cups on the chest.

Oct. 21st. Does well; has slept during the night; wants to eat; tongue clean; thorax is sensibly relieved; rales rarer; less mucus. 30 dry cups on inferior extremities.

Oct. 22nd. Same state. 80 dry-cups on inferior extremities; soup four times.

Oct. 23rd. Color of the integument almost normal; abdomen soft, indolent; chest almost freed; diarrhoea still involuntary; has appetite. Soup four times.

Oct. 24th. Amelioration increasing; tongue clean; respiration normal in the whole extent of the chest; has become more sonorous; diarrhoea still involuntary; has appetite. Injections of starch and laudanum; soup four times.
Nov. 1st. Appetite strong; 80 pulsations, small; skin cool; sleeps well; tongue moist; still a little diarrhoea in bed; some cough, but without rales perceptible to the ear. The state of the intestines becomes gradually modified, and the patient quits the hospital about twelve days after, cured.

In this patient, as has been seen, the relief was prompt, especially at the moment when the cups were applied in great numbers (18th October).

The employment of this means has not, however, appeared to have any effect upon the intestinal phenomena, which continued many days after the favorable termination of the thoracic symptoms.

[The history of the four following cases, would occupy more space than is necessary to prove the success of this mode of treatment. I therefore abridge the account of the author, noting only those complications which might influence the practitioner in deciding on its employment, and perhaps prevent it, if he had not the experience of others to support him.—TRANSLATOR.]

**Observation III.—Typhoid Fever—"à forme Thoracique;" employment of dry-cups to the number of 460. Cure.**

Jan. 31st, 1857. Mary Poussot, domestic. The answers of the patient are short, announcing an intelligence, either naturally weak, or enfeebled by the disease; sick fifteen days; chills, pains in back and limbs, diarrhoea, want of appetite, great thirst; cough intense, without expectoration. These symptoms have existed from the commencement.

Feb. 1st. Actual state, decubitus dorsal; extreme debility; complete immobility—rising impossible, even to take medicines; face bloated; eyes dull and half closed; tongue dry, rough, of a dirty gray in the middle, bright red at the point, lanceolated; lips and gums sooty; upper teeth black; mouth bitter; tympanitic; gargouillements abundant; five or six stools a day; pulse 112, small, contracted, regular; skin hot; respiration painful; humid rales in whole extent of the chest; cough frequent and fatigueing; no expectoration; diminution of sonorousness, but not real matité; sensation of heat general; almost complete deafness; no headache; continual somnolence; tranquil delirium; very numerous spots on the abdomen and the whole of the chest. 22 grs. ipecac. in three doses, 60 dry-cups on the inferior extremities, 30 grs. ext. cinchona.

Feb. 2nd. A little better; is less oppressed; cough troublesome; less delirium; less somnolence; less diarrhoea; pulse 112. Rales about the same; face less bloated. Extract cinchona, 30 grs.; 80 cups on inferior extremities—40, morning and evening.
Injection of 12 gtt. laudanum, and 5 grs. musk; sweetened gum water.

The cups of yesterday have left large ecchymoses upon the thighs of the form of the glasses used.

Feb. 3rd. A little coma; sleep agitated; respiration easier; cough less fatiguing and loose; the rales have diminished notably; expectoration mucous, but not abundant; pulse 96; skin hot; some tinnitus aurium; giddiness. Same prescription; 80 cups in two applications; 18 grs. ipecac.

Feb. 4th. In about the same condition; rales "à grosses bulles," throughout the chest; pulse 92; skin less hot. Same prescription; 80 cups; ipecac.

Feb. 5th. The patient is sensibly better; pulse 84; skin less hot; deafness decreased; rales diminishing; oppression sensibly ameliorated; coma less; delirium hardly appreciable; 80 cups, beef-tea twice, soup twice. Same prescription.

Feb. 6th. Oppression hardly exists; general improvement; tongue about the same; pulse 80 to 84; skin without great heat; 80 cups. Same injection, same prescription.

Feb. 7th. Respiration free; few rales; no cough; no expectoration; general state satisfactory; pulse 72 to 80; intellectual state much better. Omit the cups, continue rest of prescription.

Feb. 8th, 9th and 10th. General improvement; continue prescription and diet.

Until the 19th, when she left the hospital, there was the same improvement, with the exception of pain in the right shoulder, on the 15th, which was speedily dissipated by the use of a small blister.

Observation IV. Typhoid Fever; vomitives; application of 530 dry-cups on the inferior extremities.

Feb. 19th, 1857. Elizabeth Pausser, aged 22 years, a domestic—has resided in Paris six months—was confined two months since; has never been perfectly well since, on account of too severe work.

Feb. 20th. Actual state.—Extreme prostration; complete immobility; gums are brown, covered with sordes to the teeth; tongue dry; brown in the centre, red at borders and point; mouth dry; deglutition easy; no nausea, no pain in the abdomen; four liquid stools, yellow, sometimes involuntary; urine scanty, difficult and painful to emit; complete inappetence; thirst great; sonorous rales throughout the chest; cough frequent; expectoration mucous and tolerably thick; dyspnœa; pulse 112, small; skin hot and dry; severe headache, eyes half closed; complete deafness; spots on the abdomen pretty numerous. Sweetened gum water, two glasses of seidlitz water in the morning, 15 grs. ext. cinchona in the evening; beef-tea 4 times.
Feb. 21st. Pulse 112; skin hot and dry; tongue very dirty; little diarrhoea; thoracic phenomena the same, without any more intensity. On account of the state of the tongue, tart. antimony gr. $\frac{3}{4}$, 15 grs. ext. cinchona, for the evening.

Feb. 22nd. Emetic acted three times; little diarrhoea; pulse 112, small, compressible; skin less hot. Same prescription, less of tart. antimony.

Feb. 23rd. Respiration much more embarrassed. On both sides, and at the summit of the chest sibilant rales are heard, mucous rales very abundant everywhere else; otherwise, same general state. 30 dry cups on inferior extremities, rest of prescription ut supra.

Feb. 24th. She says that the cups have given her great relief, and asks for them again; in fact, the chest dilates better, and respiration is less painful. The pulse is 116, compressible; skin hot; tongue more humid; epistaxis for the first time. 30 dry cups, ext. cinchona 15 grs., beef-tea 4 times.

Feb. 25th. A little delirium; pulse 112; sacral region red; state of chest nearly the same. 50 cups, injection of 5 grs. musk, 5 iss* laudanum.

Feb. 26th. Less oppression; the rales and dyspnœa are less marked; delirium more calm. 50 cups.

Feb. 27th to March 7th. 50 cups, 40, 40, 40, 30, 30, 30, 30, 30, 30. Other treatment consisted of ipecac, cinchona, wine, beef-tea, etc., according to indication. On the 28th, she left the hospital perfectly cured.

Observation V. August 14th, 1857. Eliza Roger, aged 22 years—sick more than a month—miscarried ten days since, at six and a half months; the lochia flows still. Actual state, very much like that of Observation IV. 2 glasses seidlitz water, 100 dry cups (50 morning and evening), beef-tea and soup. The treatment of this case, up to the 21st, was that of the cases mentioned above, consisting of cinchona, laudanum, enemas, soups, etc.; 50 dry cups morning and evening, daily. The improvement of the patient was marked—cough lessening; rales diminishing; tongue becoming cleaner; sleep good; diarrhoea less; pulse less frequent. On the 21st, the cups were discontinued, diarrhoea became abundant, but the chest seemed to be doing well. Laudanum enema.

[Although the cups were no more used in this case, still the

* The original reads 6 grammes, equal to 5iss of our measurement, evidently an error. From what I have seen of the practice of French physicians, I would hardly believe that the amount given was one-fourth of that quantity. They give opium in much smaller quantities than we do.—Translator.
disease having assumed a new phase, demanding a different course of treatment, and the treatment of this particular patient illustrating that of the French, generally, I will give the author's account in full; and as it was successful in this instance, it may be of practical benefit to some of the readers of the Journal. Tr.]

Aug. 22nd. The cough became again very painful; rales are heard anew throughout the chest; the sputa are bronchial with some filaments of brownish blood; sleep is impossible, on account of the frequency of stools. Gooseberry syrup; continue enema (laudanum gtt. xij.); beef-tea, 4 times.

Aug. 23rd. Diarrhoea still more frequent. Add to prescription a potion, with 4 gtt. laudanum.

Aug. 24th. At night, on the 22nd and 23rd, she had some vomiting, of which no mention was made at the visit of yesterday. Yesterday evening, the vomiting recommenced, accompanied by a liquid diarrhoea, very abundant, white, persisting; dejected aspect; eyes sunken, surrounded by a bluish circle; indifference to surrounding objects; immobility; visage wasted; speech feeble, slow—complains of suffocating; pulse 100; hardly perceptible; blue voluminous veins are seen upon the chest; skin cold; pulsations of the heart barely perceptible. It is impossible to know if the patient urinates, the stools being involuntary, may be mixed with urine. The potion of laudanum prescribed yesterday was vomited on the spot; in the evening, the interne of the ward, prescribed ice; gum julep 3 v, with rum 3 iij; diet.

Aug. 25th. She vomited but once during the day of the 24th, but in the evening, the vomiting recommenced and lasted all night. She has had but one stool, which is yellow; she appears a little better. Her pulse is a little increased in frequency (112); the skin has resumed its heat; face less pale, but the eyes are as much sunken. Same prescription.

Aug. 26th. Reaction is fully established; pulse 108; skin hot; face red; eyes sunk. Still some vomiting, but no diarrhoea. Urinated yesterday. Ice; beef-tea twice.

Aug. 27th. In the night, vomited considerable quantity of bile, in which there floated numerous white clots; pulse 108, small, dicrotic; skin hot; face red; eyes less sunken; extreme debility; three diarrhoeal stools; tongue moist, lighty white; no headache; great thirst. 2 large enemas, with 12 gtt. laudanum in each; ice; soup twice.

Aug. 28th. Pulse 108; skin very hot; vomiting continues; diarrhoea. Continue enema potion with rum 3 iij; ice; diet.

Aug. 29th. She has again vomited this morning, a green liquid; tongue a little swollen, yellowish gray; pressure upon
the right iliac fossa determines pain; abundant diarrhoea; urinates easily; pulse 100, dicrotic; eyes less sunken, visage good. The patient says she does not suffer; aspect better. Continue the treatment.

Aug. 30th. She has vomited a little, but her visage has assumed its normal aspect; slept all night and without waking; mouth bad; diarrhoea; pulse 96, dicrotic. 2 large enemas with laudanum 12 gtt.; beef-tea 4 times.

Aug. 31st. Has not vomited since; tongue humid, hardly white; thirst; a little appetite; no diarrhoea; sleep good. Laudanum enema; half portion (hospital diet).

September 1st. No more vomiting; no stools for two days; aspect good; face rose color; eyes not sunken; pulse 96, scarcely dicrotic; tongue humid; sleep good; ate with pleasure. Demi-portion.

Sept. 2nd. Continues better. One portion.

Sept. 5th. Doing very well; tongue rose-color, humid; appetite; little thirst; no diarrhoea; pulse 68; skin cool. 1 portion. On the 7th, she ate some unripe grapes, followed by diarrhoea on the 8th: that evening vomited a little, also at night. Pulse 96; skin hot. 2 enemas, laudanum gtt. xij, in each.

Sept. 10th. This new indisposition was followed by no results. Left the hospital well.

Here again is seen the modification obtained by the use of the dry-cups, and the return of the epi-phenomena at the moment they were suspended; the intercurrent choleraic symptoms rendered a new employment of this means useless.

In the observation about to follow, the commencement of which did not pass under my eyes, I will call attention to the nature of the expectoration, which was at first composed of sputa of a yellowish color, thick, rounded, nummular, quite analogous to those observed towards the end of the measles, and which presented afterwards some sanguinolent striae.

The generalization of the rales, their seat the summit, the lively heat of the skin, the small number and doubtful appearance of the spots—all in a woman, blonde, chlorotic—could give rise to doubts, at first sight, upon the diagnosis, and lead to the impression that we had to do with an acute phthisis. The intestinal phenomena, and the march of the disease, assisted us in avoiding that error.

Observation VI.—Typhoid Fever, "à forme Abdominale in its début; thoracic phenomena towards the twenty-second day. 200 cups; ext. cinchona. Cure.

Eliza Legarois, age 15 years, domestic; always of good health; not yet menstruated—has lived in Paris only one month. Two or three days after her arrival at Paris, she was taken with a
bad headache, which persisted, eblouisements, (to which she is subject); cough, with oppression; diarrhoea not abundant; complexion dull and white, hair light, mucous membranes pale, continued souffle in the vessels of the neck.

On her entrance, Sept. 23rd, about the eighth or tenth day of the disease, a typhoid fever "à forme abdominale," with symptoms not grave, was diagnosed.

During the first days of October, the cough augmented in frequency and intensity; she became more oppressed.

Oct. 11th. Besides the abdominal phenomena slightly marked, I found, in the chest, numerous rales, offering towards the two summits, characters of the sibilant, and towards the middle, as far as the base, a mucous stamp, especially on the right side. Apply 40 dry-cups on inferior extremities; sweetened gum water; ext. cinchona 7½ grs.

Condition of the patient Oct. 12th. Coughs as much as during the preceding days, but says she is less oppressed since the cups were applied, and expectorates more easily. The sputa resemble those of a bronchitis at the period of coction; they are yellowish, thick, rounded, much striated with brown blood, (proceeding from the fauces,) and in no way analogous to that of pneumonia: tongue tolerably humid, glutinous, wide at the points, yellowish-gray at base and middle; mouth bad; no appetite; considerable thirst; a little diarrhoea; two to five stools; gargouillement pretty abundant in right iliac fossa; no pain on pressure of the abdomen; no well-marked rose-spots; no sleep; pulse 96, skin a little hot. Percussion indicates nothing very abnormal in the chest, which, however, does not resound well; without real matité, especially on the right side. Auscultation reveals mucous and sonorous rales in all the chest—they are sibilant towards the two summits, and mucous at the base and middle parts, posteriorly, particularly on the right side. Ext. cinchona, grs. xxx.; pil. opium, gr. ⅛; coffee, f ⅘iv.; 40 dry-cups.

Oct. 13th. Coughs as much—is also oppressed; does not sleep; same sputa, still sanguinolent, abundant. Same prescription.

Oct. 14th. Oppression a little less; rales still abundant, although less numerous; tongue cleaner; pulse less frequent (88), skin but little hot. 40 cups.

Oct. 15th. Still much oppressed; sonorous rales throughout the chest; intermixed with less of the mucus; little sleep, pulse at 88, skin less warm. 40 cups.

Oct. 16th. Says she is much better; she respires more easily; the rales have much diminished, and the sonorous rales are rarer; sonorous rale is better marked; cough less painful; expectoration easy; the sputa are less thick, less yellow, but little
striated; tongue moist, wide, whitish; no thirst; a little appetite; pulse 68, regular; skin cool. Omit the cups; two eggs, and a little bread; ext. cinchona 30 grs.; sweetened gum water for drink.

Oct. 17th. Pulse 48, regular; skin cool. It is with difficulty that one hears a few rales in the chest. No diarrhoea; expression much better and more gay: on the whole, she does well. Bordeaux wine, $\frac{3}{4}$iss., cinchona 30 grs., one portion.

Oct. 18th. Pulse 60; skin cool: does well. 19th. The patient feels well, has a good appetite, sleeps well; only she is feeble, and when she desires to rise and walk she falls—not that she has attacks of giddiness, but her legs bend under the weight of her body.

This condition still improves; the respiration to day (22nd October) is everywhere pure, without mixture of rales; no expectoration: the diarrhoea has disappeared; pulse from 60 to 64, it assumes a little consistence; appetite is excellent; debility and palor are the only symptoms which persist.

I could add to these facts, many others, which would only be a repetition. I hope those which precede will appear conclusive in favor of the means which I propose—which, I repeat, has given most satisfactory results to my friend, Dr. H. Bourdon, upon the patients observed by him at the "Hôpital Laribosière." I will insist upon the complete harmlessness of this mode of treatment; never have I observed any local disorder follow the application of dry cups, and never has this derivation, although very energetic, determined any trouble in the economy, probably because it is, so to say, gradually effected. This harmlessness is, then, one motive the more, why we should not hesitate before the employment of this means.

It has been remarked, also, in some of these observations, (obs. 2, 3, 4,) that somnolence, tranquil delirium and deafness, have seemed happily modified by the use of this means. I have seen, in some other cases, the application of dry-cups in great numbers, calm the tranquil delirium and dissipate promptly both somnolence and coma, notably, in a little patient of 15 years, observed in October, 1855, at the "Hôpital Beaujon." In these last cases, the cerebral phenomena were predominant, and nothing very well marked was determined on the side of the lungs. The utility of this powerful derivative in comatose forms of the disease, appears to me, more than probable; but I have not, so far, studied the fact in a sufficiently rigorous manner to form a precise opinion on the subject. As for the atactic forms, with violent delirium, in three cases where I attempted to employ this method, it gave me no result, and the opiate preparations, in doses sufficiently strong, united with musk, appear to me to be much preferable.—[Archives Générales.
The diseases of the eastern part of the first division or tertiary formation of Georgia are thus treated of by Dr. P. M. Kollock, of Savannah, beginning with the Sea Islands:

"The inhabitants enjoy very great immunity from the diseases of the opposite main. And such as have few or no brackish ponds or lagoons, are more healthy than such as contain a greater number.

"In very wet seasons, the different forms of miasmatic and bilious fevers prevail to a considerable extent, but they are exempt from every species of malignant and fatal epidemics. I have never known cholera asphyxia to occur on any of the outer islands. In winter, sporadic cases of pneumonia are occasionally met with, together with ordinary catarrhal and pleuritic affections.

"The main opposite the Sea Islands is decidedly sickly, and infested by the various forms of miasmatic disease.

"In winter and spring, epidemic pneumonia, of typhoid type, is not unfrequent, particularly on the rivers and swamps. In summer and fall, the various forms of bilious fever, sometimes congestive, and occasionally exhibiting typhoid symptoms, prevail.

"Passing further inland to the region of sand-hills and long-leaf pines, the inhabitants enjoy a very large share of health, and when the possessors of the comforts of life, as regards shelter, food, and raiment, exhibit an embonpoint, a ruddiness of complexion, and contented, happy expression of countenance, seldom surpassed in any climate. As a general rule, they are strangers to epidemics of all kinds.

"In winter and spring, cases of pneumonia are met with, and in summer, particularly in seasons prolific of fruit, there may be dysentery; it is rare for severe cases of fever to occur in this section.

"The winter of 1852 was the coldest that has been known for many years in this district. Two snow storms occurred at Savannah, but very little rain. There was no great amount of disease—a few cases of pneumonia occurred in my own practice—and I observed a very strong tendency to the formation of whitlows, resulting from slight injuries to the hands.

"Towards August, cases of fever began to multiply in the city of Savannah and its vicinity, and between that period and the month of November, very few of the laboring population escaped.
“During the month of August, some cases of yellow fever, accompanied with blackish discharges from the stomach, were reported; the number increased as the season advanced. The greatest number occurred as the season advanced to the month of October, when it proved fatal in almost every instance.”

The yellow fever was but little known until after the war of 1812. It was not until the winter of 1816 that foreign shipping began to resort to Savannah, and the next summer the harbor was crowded; no care was taken to time the arrivals to the healthy months, and the seamen were strangers entirely unacclimated.

In the month of August, the yellow fever first broke out. It was confined to the seamen, and continued until the shipping departed; there were not many cases. During the following year, 1818, there were few arrivals, and all had left port before the summer had fairly set in, and there was but little sickness.

In the year 1819 many ships arrived, bringing a great many strangers, totally unused to the climate and unacquainted with the diseases to which they were exposed. Early in the autumn, the yellow fever commenced its ravages, and in less than a month the whole number of passengers who had been brought by one ship had fallen victims; the disease continued until cold weather, and was confined entirely to strangers.

In the beginning of the year 1820, a great part of the city was burned down, and the population was consequently crowded into the narrow limits left by the fire. The ruins were for the most part left in a state of total neglect, and many of the uncovered sinks and vaults remained open, exposed to the weather until they were filled up by the sand washed into them by the rain, which was more than usually copious in the latter part of the season. The excavations made for the foundations of new buildings were highly offensive, particularly during the night.

In the latter part of the summer, the yellow fever began, and increased to a frightful extent, but its ravages were still mostly among the unacclimated, few natives or old residents dying. The disease continued until late in the winter.

In 1821 the yellow fever began as in the year before, and now attacked the natives and old residents, more of whom died than did the year before.

The citizens were now thoroughly alarmed; a board of health was organized, and a system of visitation of the yards and buildings was put in operation; a new scavenger arrangement was made, and the city was thoroughly cleansed, so that the Cathartes aura and C. atratus, commonly known as Turkey buzzards, which were as tame as barnyard fowls, and the most effective scavengers before, became wild. The yellow fever also disappeared, and for five years was not seen. The dread of its visita-
tion seemed to have been forgotten, the members of the Board of Health soon became tired of their "useless" labors, and ceased to attend to their duties. An officer was appointed to inspect the lots, &c., but his visits soon became odious to those who most needed them, and the city became very exactly in the condition, as to cleanliness, that it was in before the beginning of the three years of fever. The Cathaites aur. and atr. returned, and in the early part of the summer of 1827 they were seen in the most populous part of the city fighting for offal in the street. Not long after this, the yellow fever made its appearance and carried off seven of the most prominent citizens, being all old residents, in rapid succession. This opened the eyes of the people to the necessity of a more constant attention to sanitary measures; the city was again thoroughly cleansed, the buzzards again took to the woods, and have never returned.

The yellow fever has not since been epidemic until the year 1854, when the city being crowded with Foreigners, mostly Irish laborers, it broke out again with such mortality as to produce general consternation; however, but few of the acclimated were severely attacked.

The epidemic spread more widely in the State than it ever had before.

In the autumn of 1834, the epidemic cholera commenced on some plantations twelve or fourteen miles above Savannah on the river, and gradually approached the city, where it continued for nearly two months, when it ceased its ravages very suddenly; negroes were the principal sufferers, and upon its appearance a few years afterwards, it was confined almost entirely to them.

Dr. O. P. Bealer, of Effingham County, in a communication to Dr. Kollock, in 1853, says: "The prevalent disease of the last year, 1852, was typhoid fever, in the majority of cases, the result of neglected bilious fever; it was remarkably fatal; the deaths in this county the last year numbered more that those of any one year, as far back as the oldest citizens can recollect, and they were principally from typhoid fever.

Dr. T. R. Dunham says, that "the prevailing diseases of Camden County in winter and spring, are typhoid pneumonia and influenza. These yield during the summer and fall to diarrhoea, remittent and intermittent fevers, accompanied with the most violent headaches, and great irritability of stomach."

Dr. T. S. Hopkins, of Waynesville, writing of the diseases of the low lands in Glynn and Camden Counties, in the neighborhood of the Great Buffallo Swamp (which section, he says, is healthy in very wet or very dry seasons,) in the year 1852, says: "The past season has been extremely wet, and I have only to report, for the spring months, a mild form of influenza, and for the fall, quotidian and tertian intermittent.
Dr. H. Briggs, of Troupville, speaking of Lowndes County, says: "The climate disease which manifests itself more or less, during some part of every year, is the remittent or intermittent malarial fever, usually of a mild form, but with occasional cases of malignant intermittent, congestive, algid, and other varieties of pernicious fever.

"Hooping-cough, mumps and varicella have repeatedly prevailed in all this region as epidemics.

"Scarlatina prevailed co-extensive with the limits of the county during the years 1838 and 1839. It has appeared twice since, in 1844 and 1855, but could scarcely be considered an epidemic, either of the two last times.

"Abscess, in the form of whitlow, furunculus, anthrax, and deep-seated abscess, has sometimes appeared as an epidemic, more especially during the summer and fall of 1854, continuing several months, the ordinary climate fever disappearing altogether during the time.

"Dysentery appeared as the prevailing disease in the autumn of 1843, from which time till the spring of 1853, there were only a few sporadic cases. It has prevailed more or less at all seasons, and in all parts of the county from that date up to the present. In some neighborhoods the accompanying fever is of typhoid type, in others most decidedly inflammatory.

"Rubeola made its appearance in June, 1856, for the first time since 1837. The disease was of a grave character, often attended with low form of fever, and dysenteric symptoms, often succeeded by a most obstinate diarrhea, œdematous swellings of the lower limbs—a tendency to passive hemorrhages, and sometimes ulcerations and sloughing of the integument.

"Influenza, or grippe, often becomes epidemic. It seems to act as a predisposing cause of bronchitis, pneumonia, pleurisy and catarrhal ophthalmia. Sometimes a patient complains of violent pain in the head for a few hours without any signs of pneumonic inflammation, quickly followed by prostration, coma, difficult respiration from mucus accumulating in the bronchial tubes; death soon ensues.

"A continued fever prevailed in the western part of the county in the latter part of the year 1839, and first half of the succeeding year. Again in the southeastern part of the county, through all the winter and spring from November, 1846, to April or May, 1847. A malignant fever and highly contagious typhoid fever have prevailed in some section of the county more or less every year since 1850; a half dozen or more cases in one family or neighborhood, then appear somewhere else. The county has not been entirely clear of cases of that variety of fever, but very few months in all the last six years.

"In the spring and summer it very much resembles ordinary
remittent for a few days at first. In the colder part of the year it is usually without any regular remission, a straightout continued fever from the beginning.

"Puerperal fever is sometimes for a few months much more prevalent than at others; I do not, however, believe it has occurred as a true epidemic disease.

"The same is true as regards jaundice, uterine hemorrhage and many other non-febrile diseases.

"Dirt eaters and anæmic patients are always extant."

Dr. G. F. Cooper, of Houston County, in 1853, thus gives the prevalent diseases of that county, which may be taken as the sample of all the upper part of the first or tertiary division. "Rubeola, diarrhœa, dysentery, and idiopathic fevers," he says, "constitute the list of diseases which have been treated during the last year.

During the months of April and May, we had an extensive epidemic rubeola, so called, and in some parts of our county it was attended with a fearful mortality. This was especially the case where a typhoid type obtained. Many of the cases which came under our observation did not possess the usual characteristics of rubeola, and even those in which the eruption conformed nearest to the genuine form of the disease, desquamation did not follow. It appeared to me to be a blending, in many cases, of rubeola and roseola. The rubeolous eruption was evolved upon a roseolous base, the latter, I believe, appearing invariably first, followed by the papulous eruption of measles. The eruption usually appeared on the third or fourth day, and was shorter lived than in genuine measles, particularly in those cases where roseola prevailed, and was observed to be wanting in that crescentic arrangement laid down by authors. It also attacked a number who were known to have had rubeola previously. No age, sex or race was exempt. In those cases where roseola appeared, the attack was not accompanied by any catarrhal symptoms.

"In all cases there was an unusual proclivity to diarrhœa; this appeared to be independent of the eruption, for in many cases where it was standing out in full crop, diarrhœa would be persistent, with griping pains and vomiting, and not unfrequently, the former were exceedingly severe.

"It was also remarked that, after the entire subsidence of the eruption, the diarrhœa would continue for days.

"During the prevalence of this epidemic, there was a high range of temperature, the thermometer not unfrequently rising above 90°. Rains were frequent; it was almost continually cloudy, with a high dew-point.

"As is usual in wet seasons, intermittent and remittent fevers prevailed to a great extent, but we had less typhoid fever than the previous year."
The diseases of the lower part of the second or primitive geological division of the State vary considerably, according as the locality approaches the lower or upper limits of the old settlements below the mountains.

Dr. Wynn, in a letter to Dr. G. F. Cooper, says: "in Monroe County they are free from the usually called 'local causes' of disease, and from their usual consequences, intermittent and bilious remittent fevers, and they have been very rare for several years.

"In the early spring and winter, we have a little pneumonia, catarrhal influenza, &c. In summer, enteric affections prevail, diarrhoea, dysentery, and cholera morbus.

"Our fevers of summer are those that have received among us the name of typhoid, though I must say I have seen none that I thought approximated in its symptoms the specific typhoid fever of the books. But for all the cases that I have seen, I like better the title of nervous, for they all have wanted the enteric lesion, the large spleen, the eruption, &c.

"In fact, they have seemed to me entitled to be considered congestive fever, with cephalic tendency,

"Dr. Hood, of Harris County, says: 'In the spring of 1851, typhoid diseases became epidemic, and were the prevailing diseases until May, 1852, when we were visited with another and more fatal form of disease, though I considered it a modification of typhoid fever.'

"Another class, or modification of the same disease, prevailed at the same time, and with fearful fatality. It presented all the features of the foregoing, attended with frequent bloody sanious stools, recurring at regular intervals in many cases, in spite of all treatment; opium, morphine, tannin, acetate of lead, anodyne enemata, &c., &c., and continuing week after week, to death or recovery. The small bowels were evidently the seat of the disease; no griping or tenderness in the region of the colon or rectum."

Dr. Knott, of Griffin, Spalding County, communicating to Dr. Cooper, in 1853, says: "The most prevalent diseases among us in winter, are pneumonia, typhoid pneumonia, pleuro-pneumonia, bronchitis, inflammatory fever, rheumatism, neuralgia, &c. In spring, diarrhoea, especially among children, dysentery, among all classes, ages and sexes. In summer and autumn, occasional cases of bilious fever, with a marked tendency from the first, to run into the typhoid form. The most remarkable feature of pneumonia, is its complication with the typhoid form of fever, and in some cases, not characterized by marked remissions or exacerbations. In all the cases of diarrhoea and dysentery, the bilious diathesis was present, consequently I directed my remedies to that function.

"In the treatment of typhoid fever, as well as pneumonia of
like character, my reliance was upon mercurials, with a view to
their alterative effect, and antimonials, as a sedative, combined
with opium, aided by mild saline cathartics, and as valuable aux-
iliaries, counter-irritants."

In approaching the mountainous part of the second division, it is found that the diseases are more inflammatory in type, seeming
to be more the effect of the great and sudden changes in the
temperature and moisture, than of any local causes, especially in
the winter and spring months, but in some places spring inter-
mittents, attributed to malaria, are frequent.

In the summer months, bilious remittents and intermittents are
occasionally met with, and in wet seasons, diarrhoea, cholera mor-
bus, and other disturbances of the digestive function, are not un-
common, especially during the greatest heat.

In the fall of the year, bilious fevers put on a more malignant
form, most commonly with some one symptom, or some complica-
tion seeming to take the lead, and to give character to the disease
in one year, and some other peculiarity in the next: thus, if in
the commencement of a sickly season, we see a case of fever be-
inning with the usual feeling of lassitude, uneasiness, pain in the
head and back, but with less flush on the skin, and the pulse not
so full and bounding as in other cases, with slow deep breathing,
and a torpid, careless state of mind, with constricted skin—"goose-
flesh"—on the application of cold air or water to any part of the
surface, indicating an irregular circulation, with determination
to the deep seated bloodvessels—we have a case of congestive
fever. And we are exceedingly apt to find it followed shortly by
other cases very much like it. In fact, for some unknown cause,
every disease of whatever kind, even if caused by mechanical
injury, will show more or less proclivity to this same congestion.

Again, if in the beginning of the fall fever season, we see a
case of urticaria running into fever, with great heat of the surface,
anxiety, oppressed breathing, restlessness, and violent pain in the
head and back, we have a case of "rash-fever," which will, most
probably, tax our skill and industry to the utmost: and will doubt-
lessly be followed by like cases during all the remaining season.

Thus we have once in a while, an epidemic fever of one name,
and then of another, as one symptom or another, or one complica-
tion or another may happen to prevail.

Scarlatina, rubeola, varicella, pertussis, parotitis, erysipelas,
dysentery, and some other diseases of minor importance have
prevailed as epidemics at uncertain intervals of time, in the whole
of the primitive division of the State.

We now come to the diseases of the third division of the State,
the transition, or blue limestone region; the last part of the
State settled.

I am indebted to Dr. Robert C. Word, formerly of Cassville,
Cass County, but now of Rome, Floyd County, for all that I can say on this subject.

Dr. Word prefaces his account of the diseases of this country by a notice of the domestic habits of the people.

"Much of the disease," says he, "peculiar to the country is unquestionably due to a disregard of the laws of health. Imprudent exposure to the multifarious changes of climate, is the most frequent exciting cause of disease in the colder seasons. Though, of late years, it may be said that a majority of the inhabitants are well clothed, yet their houses are generally too open to furnish adequate protection from the chilling moisture of the winter season. Defective ventilation in cities is, perhaps, not more injurious to health than excessive ventilation in the country. Much of disease, also, may be attributed to cold, wet feet, consequent upon the muddy nature of the soil, for which the country is proverbial, and to which long custom has rendered the people careless and indifferent.

"As would be inferred, from the varying circumstances which we have mentioned, different diseases prevail during different seasons of the year, and furnish to the practitioner a more diversified experience than is found in some other localities. Catarrhal fever, rheumatism, pleurisy, pneumonia, and kindred phlegmasiae, are common in winter and the early part of spring. Typhoid fever, a few years since, was only observed in winter, and is still most generally designated, in popular language, as winter fever. More recently, it has occurred also in summer and autumn. With the commencement of the heat of summer, a few sporadic cases of dysentery and diarrhoea make their appearance, becoming gradually more numerous, until they are so generally prevalent as to deserve the name of epidemic. Not unfrequently having so prevailed for a few weeks in June and July, they subside for a time, to reappear in a more fatal form during the autumn. a few cases of remittent and intermittent fever are met with in the early part of summer; they usually increase in number and violence as the season advances, and shortly before the return of cool weather, occasional examples of the congestive form of this disease are observed, rarely, however, at an earlier period. Not unfrequently these febrile attacks make their appearance during the suspension which has been remarked in the prevalence of bowel affections, and continuing conjointly with them, but attacking different subjects until the end of the warm weather.

"The autumn is marked often by the prevalence of influenza, of a mild form, which some persons have attributed to the great difference between the temperature of the days and nights at this period, and others to the constant inhalation of the dust, with which the atmosphere is loaded.

"The almost regular succession of annually prevalent maladies,
and many others of occasional, but irregular occurrence, together with the marked peculiarities impressed upon all in particular years, or during particular seasons, by prevailing epidemical or atmospherical influences, exact an unusual amount of caution and practical tact in diagnosis.

"A few years after the first settlement of the country, malarious diseases were uncommon, inflammatory diseases more frequent than at present, the inflammation of higher grade, and vigorous antiphlogistic treatment better borne, and more successful than at present. With the clearing up of the land, exposing a larger surface, covered with a rich vegetable mould, and saturated with the rains of winter, to the action of a summer's sun, there has been a marked increase of all the affictions which malaria is supposed to produce, and a very observable modification in the general sanative condition of the population, or in the character of many diseases which it is not pretended that malaria originates, but over which it appears to extend its mysterious influence. Many of the inflammatory attacks, occurring in winter in the last few years, have been found to assume the livery of this subtle morbific agent, evincing a decided tendency to periodicity, and demanding the administration of quinine. Many others, it is true, offer no such peculiarity, but are truly and frankly phlegmasiae, requiring for their successful treatment free and bold employment of the lancet, and all the antiphlogistic expedients so familiar to the past generation of physicians. This intermingling of symptoms, blending of lights and shadows, is still more common in autumn and spring, and more embarrassing, because a just diagnosis is often difficult, and a mistake highly dangerous. To subject a patient previously enfeebled by miasmatic influence, or actually laboring under an irregular form of miasmatic disease, though simulating, with astonishing accuracy, an acute inflammation, to the debilitating effects of the antiphlogistic treatment is not simply unnecessary, but as has been too often sadly demonstrated, hazardous or fatal, producing prolonged debility, tedious convalescence, or else speedily, or more remotely death. To omit to do so, upon the other hand, when an important organ is truly the seat of active inflammation, is to expose him to immediate peril, or to the doubtful consequences of the pathological changes by which that condition is followed. In a more malarious region, as well as in districts where the influence of malaria is less marked, the nice discrimination so often demanded here is, perhaps, less important, but the ability to make it, in this section, decides between success and the want of it.

"Tubercular disease, although it cannot be said to be prevalent amongst us, is by no means unfrequent. Tubercles in the lungs are more common than in more southern and less elevated regions, where there are fewer alternations in the weather, and
less humidity. Experience has shown that the locality is not a good one for consumptive persons, or those who are predisposed thereto. Whether originating in the country, or introduced from abroad, the disease runs rapidly through its various stages to a fatal termination.

"Typhoid fever, I believe, made its first appearance in this part of the State in the winter of 1842, at which time a number of cases were seen in the immediate vicinity of Cassville. For a few years subsequently, the disease was confined entirely to the winter season, and it was not until about the year 1846 that it began to occur in the spring and fall. In the years 1846 and 1847, it prevailed extensively throughout the greater portion of Cass County. More than sixty cases came under our observation in those two years, and though the fatality was not very great, the cases were generally obstinate and tedious, running their course in a period of from three to six weeks, with a tendency to a favorable termination when unmolested by drastic remedies. Most of the fatal cases which occurred we believe to have been due to the injudicious use of purgative medicines, usually prescribed by the patients themselves before consulting a physician. Since the period above referred to, the disease has continued to prevail, varying in extent and violence at different times, and extending its baneful influence to other and milder maladies. Occasionally it breaks out afresh in different or in the same localities, complicated with features and peculiarities not previously observed. Many cases present malarial peculiarities, and are marked with tertian exacerbations. Others are complicated with pneumonia or rheumatism. It has been followed by the congestive form of the disease, which in a large majority of cases, proved rapidly fatal."

Dr. T. J. Word, of Floyd County, in 1853, said that "typhoid fever has prevailed in Floyd as an epidemic for two or three years past mostly between the months of October and the beginning of spring, during which time it has taken the field to the exclusion of most other diseases, or compelled them to form an alliance with it. In the fall, it was occasionally associated with remittent fever; in the winter with pneumonia. In the nervous, it was sometimes associated with neuralgia, and in the female, with hysteria.

"The cause of its general prevalence for a few years past can only be satisfactorily explained by admitting it to be an epidemic. Upon no other ground can we explain its appearance in regions where not one of the local or endemic causes exist to which its production has been ascribed.

"It occurs in the hilly and broken sections of the country, and in families who enjoy all the comforts of life, and are exempt from every apparent local cause of disease. Other causes than confin-
ed or vitiated air, decomposing animal or vegetable matter, or standing water, must be adduced, as it is known to occur in a malignant form where none of these causes exist. 'The presence of the typhoid principle in the surrounding medium exercises a controlling influence over the cause and duration of other diseases.' In further confirmation of this view is mentioned the increased or altered sensibility of the gastro-intestinal canal to the impression of cathartics, that part of the economy to which the force and violence of typhoid fever is directed. 'The smallest doses of the mildest cathartics have been known to occasion exhausting purgation.' 'That there has been for some time an epidemic constitution of the atmosphere, and that, under different states and temperatures, it may produce different effects, and give rise to a variety of morbid actions according to the predisposition of the system at the time, does not, I think, admit of a question of doubt.'

'Dysentery prevailed extensively in the years of 1851 an 1852. During the summer of the last, it was attended with a considerable mortality, especially among children.

'The inhabitants of the valleys and creek bottoms suffered most. The weather was warm and rather dry during the prevalence of the disease.

'During the epidemic last summer, diarrhoea prevailed also, and not unfrequently was found associated with dysentery in the same subject. Copious sanguineous or serous discharges would sometimes alternate with dysenteric discharges. This form of diarrhoea was usually very prostrating in its effects, and in some instances proved suddenly fatal. It was attributed by many to the cholera atmosphere then supposed to pervade the greater portion of the United States. The occurrence of fatal cases of cholera morbus at the same time give credibility to this opinion.

'The months of July and August seldom pass by without the occurrence of many cases of bilious dysentery, in some of which the influence of malaria is very perceptible.

'Influenza, or epidemic catarrhal fever, is of frequent occurrence. It may be said to be a regular visitant of the spring and fall seasons, each visitation being characterized by some new peculiarity. In the fall of 1851 a form of the disease prevailed, marked by the following symptoms: pain in the head, back, and extremities, cold shivering sensations, deep bronchial cough, and occasional slight fever. All of these symptoms were worse in the early part of the day. The weather was dry, but had been preceded by heavy rains; previous to the rains there was a great drought.

'Neuralgic affections are quite common in this country. They appear generally to be of malarious origin, and yield to quinine, cupping, &c. In the colder seasons the disease is frequently blended with rheumatism, and appears to be developed by exposure to cold and damp weather. The facial variety is most common.'
I have now finished the work assigned to me, to the best of my ability, and hope that it may meet the views, and fulfil the requirements of the Association.

And now, also, I make my acknowledgements, gratefully, for the assistance which I have received from those gentlemen of the profession who have given me the benefit of their knowledge.

To Dr. P. M. Kolcock I am indebted for most of the part belonging to the neighborhood of the sea, and through his instrumentality to Dr. Bealer, of Effingham, Dr. Dunham, of Camden, and Dr. Hopkins, of Wayne County.

Dr. H. Briggs, of Troupville, Lowndes County, communicated all that I have given of Southwestern Georgia.

I owe to Dr. G. F. Cooper, of Perry, Houston County, much of what I have said of the upper part of the first, and lower part of the second division.

Dr. Robert C. Word is my authority for all concerning the third or limestone division.

I have endeavored carefully to distinguish the parts due to each contributor, as vouching for the correctness of whatever I have written, whenever it was not from my own observation.


The Uses of Chlorate of Potash.


The Use of Chlorate of Potash.—In the August number of the last volume of this Journal we collected from various sources, several articles on the different applications of the Chlorate of Potash in the treatment of disease. We have since made frequent tests of its usefulness, and find that it answers an admirable purpose as a lotion, in many cases of leucorrhœa, and other affections of the vagina—and also in some cases of stomatitis, either from mercurial salivation or other causes. In one instance of sore throat, attended with great fetor, which occurred at the end of a protracted case of Typhoid fever, its application as a gargle, was followed by surprising results. We understand that Dr. W. L. Felder, of this city, has used Chlorate
of Potash, internally, strength 3j. to 8 oz. water, for twenty years, as a remedy in Typhoid fever. Dose of this solution, as used by him, was 1 teaspoonful every three or four hours. The strength of the solution used in all of our cases, above-mentioned, was two drachms of the salt dissolved in 8 oz. of water. This was applied to the affected mucous surfaces four or five times during the day, either as a gargle or as an injection, as the nature of the case required.

We here present to our readers some other applications of this valuable article, and its use in certain cases of pregnancy. We do not pretend to explain the manner of its action; but the facts here reported, though not entirely conclusive, are certainly very striking, and should at least arrest our attention.

"Dr. Dethan considers that chlorate of potash is a powerful sialagogue, and that its elective action on the bucco-pharyngeal mucous membrane is well marked. To this physiological action is added a very remarkable and valuable success in pathology; its rapid and incontestable effects in mercurial salivation, by checking the formidable mercurial affection, have permitted practitioners to continue the mercury without fear, and thus to contend without remission against the constitutional infection. As an especial and incontestable remedy in ulcerous-membranous stomatitis, this medicine need not, according to the physicians of the Hôpital Sainte-Eugénie, be swallowed; its topical application is sufficient, and in a short time the mucous membrane recovers its normal qualities and functions. Dr. Dethan concludes that the chlorate of potash, administered under a special form, which would permit the local action to be exercised slowly and certainly, although leaving the medicine to be carried into the stomach in a state of solution with the mixed liquids of the salivary, buccal and pharyngeal glands, would be the mode of administration which would combine all indications and all opinions. He therefore suggests the use of the remedy in the form of pastiles, so that the patient may have at hand a remedy against the injurious effects of a mercurial treatment which he may be undergoing. The experiments of Dr. Ricord, and the publications of M. A. Fournier, testify incontestably in favor of this successful simultaneous medication. In certain forms of angina attended with fibrinous exudations, it prevents the intimate adherence of the false membranes to the mucous membrane, and facilitates their expulsion, and assists the action of emetics. In this affection the topical action of the chlorate, favoured by the bruising between the teeth, the natural solution
The Uses of Chlorate of Potash. [March,

in the liquids of the mouth, and its penetration into all the points interested, will be certainly efficacious. In debilitating diseases, such as diphtheritis, and gangrene of the mouth, the child will find an agreeable and reparative kind of food, together with the most appropriate remedy hitherto discovered, against these diseases."

"Every one engaged in midwifery practice will have met with cases in which the child is carried successfully into the viable period, but some time between this and the full term of pregnancy, is born still, or very weakly; and this perhaps for several successive pregnancies, without any external or accidental cause to explain the premature death and delivery, and with no evidence of syphilitic taint in the parents.

"It is in such cases that Mr. Grimsdale (in accordance with a suggestion thrown out some years ago by Dr. Simpson) has been in the habit of prescribing chlorate of potass with some apparent benefit.

"Case 1.—Mrs. Darbyshire, a stout, healthy looking woman, æt. 34, was delivered of a female child, after a labor of eleven hours' duration, in the Lying-in Hospital, on the 24th March, 1852. During labor there was a large discharge of very offensive, dark-colored muddy water; the nurse told me she filled two chamber-pots with it, besides what escaped in the bed. The child was with difficulty made to breathe. It was jaundiced from birth, and died of hemorrhage from the umbilicus, on the seventeenth day.

"The placenta was diseased; portions of its maternal surface were seen to be of a pale yellowish color, and these were firm to the touch, and penetrated nearly to its foetal surface; at least one-fifth of the bulk of the placenta must have been occupied with these firm pale portions. The centre of each patch was firmer than its circumference, and it seemed to pass insensibly and gradually into healthy placental structure, having no accurately defined boundary. On the maternal surface were also several stellated patches of vessels, distinctly gritty to the touch.

"Dr. Inman kindly examined this placenta under the microscope, and he did not regard the changes observable in it as due to inflammation, neither was it an instance of fatty degeneration. This woman had had four previous pregnancies, in which she had been attended by a midwife at her own home. The children were all still-born, and said to have been yellow. Of the state of the after-births I could learn nothing satisfactory.

"About the middle of April, 1853, the patient came to me, stating that she was five months in the family way, and would be glad if anything could be done to avoid the birth of another diseased child. I gave her chlorate of potass, 5 grains three
times daily, to be increased in a fortnight to 10 grains. She con-
tinued this with but little intermission to the time of her deliv-
er, on the 13th of August, when she gave birth to a healthy
child, which is now (October, 1855) living and thriving. The
placenta was large, and quite healthy looking. I may remark,
that before commencing the chlorate of potass treatment, I made
careful inquiry as to the probability of any syphilitic taint in
either husband or wife, and could detect nothing in their his-
tory to warrant any suspicion.

"Case 2.—Mrs. Egan, a poor woman, æt. 21, pale and rather
delicate looking, presented herself at the dispensary of the Lying-
in Hospital, in April, 1853, and stated herself to be four months
in the family way. She said that she had been four times preg-
nant before, and had on each occasion given birth to a dead
child. Her labors had been of no great severity, and of moder-
ate duration; the midwife who attended her told me that the
children were small, and appeared to have been dead some days;
the after-births, she said, were 'pale in parts, and queer look-
ing.' The husband was a steady working man. I saw him; he
looked strong, and denied having had syphilis.

"The former pregnancies had been attended with no pain. I
ordered chlorate of potass, 20 grains a day. She continued this
for four months. On the 5th September she was delivered of a
fine healthy child, which is still (October 10th) thriving and
without ailment. The placenta was large and healthy.

"Case 3.—Mrs. D., æt. 33, of spare conformation, hysterical
temperament, became pregnant about six months after her mar-
riage. After quickening, the movements of the child were dis-
tinct, and increasing in power up to the end of the sixth month
of her pregnancy; she then began to feel them decidedly weak-
er; not much notice was taken of this, as she had no pain, until
in about three weeks she ceased to feel any movement. I saw
her, and on examining with the stethoscope, could hear no foet-
al heart-sound. In about a week from this she gave birth to
a dead child, the cuticle of which was beginning to desquamate.
It was well formed, but the skin was wrinkled, and it looked
ill-nourished. The placenta was in parts pale, firmer than na-
tural, and its vessels in these parts deficient in blood.

"In March, 1853, I again saw her; she was then pregnant
three months and a half. I recommended her to take the chlor-
ate of potass at once. She began with 15 grains in the day;
she had only taken it three or four days when she complained
that it made her head ache. I ordered its discontinuance, but
in a few days again prescribed it without her knowledge; again
she complained of intense headache, and I left it off for a month.
She tried it once more, but declared it gave her a most fear-
ful headache, which she could not bear. This second pregnancy
followed as nearly as possible the same course as the first, and with the same results.

"In December, 1853, she was again pregnant; I saw her when she was four months advanced, and wished her to try the chlorate in smaller doses. She took 3 grains thrice daily with impunity; this was continued for three weeks or a month; she then increased the dose to 4 grains, and subsequently to 5 grains. All seemed to go on well. The movements of the child, she said, were considerably stronger than in her former pregnancies.

"When well into the seventh month, she was riding out in her carriage, a low, four-wheeled phaeton, when another vehicle ran into them, smashed the carriage, and upset its occupants. My patient was of course much frightened; she felt, she stated, a violent commotion in her inside for some hours, but after that day did not feel any movement. She was from home at the time: in two or three days she returned; I then saw her, could detect no foetal heart-sound, and believed the child to be dead. In ten days from the date of the accident labor came on, and she was delivered of a dead child.

"Nothing could be more marked than the contrast presented between this child and its placenta, and those of the two former deliveries. The child was plump, and had all the appearance of a healthy seven months' child; the placenta was everywhere soft and spongy and its vessels seemed to have been uniformly full of blood.

"This lady became pregnant for the fourth time in the beginning of October, 1855. About the end of the third month she commenced to take the chlorate in 3 grain doses, and gradually increased it to 5 grains, thrice daily. She was occasionally compelled to intermit its use, in consequence of the headaches, as before; but with these exceptions it was persevered in until the full time of pregnancy, when she was delivered (June, 1856) of a healthy male child, now living (June, 1857). The placenta was quite healthy.

Case 4.—Mrs. ———, a stout, healthy-looking woman, came to me in November, 1854. She was between three and four months gone in the family way. She had been seven times pregnant before, but had never given birth to a living child. One child she carried to nearly the full time; five had been born between the sixth and eighth month, and one was aborted at an early period of pregnancy. I ordered her to take the chlorate in 5 grain doses, thrice daily; and after the fifth month especially enjoined the immense importance of rest; this latter injunction she seemed determined not to comply with.

"She went on well until February, 1855, frequently stating that she felt the movements of the child stronger than usual.
On the 12th, after having kneaded a large pan of dough, and performed sundry other laborious domestic exercises, labor came on unexpectedly, and she was delivered in five or six hours of a living child—the first of all her children that had ever breathed. It was a breech presentation; the child seemed of about six and a half or barely seven months' development, and only lived a few hours. The placenta was healthy.

"Case 5.—Jane D., æt. 26, presented herself at the Lying-in Hospital, September 12th, 1858. She said that last year she had miscarried at six months, without any apparent external cause. The child had been dead some time: she learned this from the midwife who attended her. She was now four months advanced. She commenced the chlorate 15 grains in the day, continued it on and off during the rest of her pregnancy, and was delivered of a healthy child at full time.

"I have notes of ten other cases similar to this last. I do not think they are worth much as evidence; they will, therefore, scarcely add to the interest of this paper, and I refrain from giving the details.

"In two cases apparently likely to have received benefit from the chlorate, and in which it was exhibited as usual, I failed to perceive any favorable result. In one of the cases, death of the foetus, and miscarriage, at the seventh month, occurred, as it had done in three previous pregnancies. In the other, the child was born dead and ascitic, at eight months and a half; the placenta being hydropic. The mother had, before taking the chlorate, given birth to four still-born children in succession.

"Of the nature of the diseased action in these cases, I am not prepared to say much. It would seem to be located primarily in the placenta, and to cause the death of the child secondarily, by the consequent effects on the placental function. The morbid appearances in the placenta would seem to be tolerably uniform: I can see no evidence of their inflammatory nature; and there certainly were no previous symptoms indicative of inflammation in any of the cases."

The Phosphates in Tuberculosis.—If Dr. Churchill's opinion with regard to the beneficial action of the Phosphates, in Phthisis, is correct, of course these remedies will be found applicable, at least rationally so, in all the other manifestations of the strumous diathesis, as the multitudinous affections pertaining to the eye, the lymphatic glands of the neck and of the axilla; affections of the hip-joint, knee-joint, elbow, and shafts of the long bones.—Calculating strongly on the chemical action of
medicines within the organism, we are aware, is not always safe from disappointment;—that is, practice does not every time confirm what theory affirms; but when experience plainly demonstrates what reason will approve, we may ever feel safe in following their joint indications.

On the Proximate Cause and Specific Remedy of Tuberculosis. By Dr. John Francis Churchill.

The following is the abstract of a paper which was laid before the Academy of Medicine at Paris, on the 21st of July, 1857:

The total number of cases of phthisis treated by the author amounts to 35. All were in either the second or the third stage of the complaint—that is, they had either softened tubercles or cavities in the lungs. Of these, 9 recovered completely, the physical signs of the disease disappearing altogether in 8 out of that number; 11 improved considerably, and 14 died; 1 still remains under treatment.

The proximate cause, or at all events an essential condition of the tubercular diathesis, is the decrease in the system of the phosphorus which it contains in an oxygenizable state.

The specific remedy of the disease consists in the use of a preparation of phosphorus, uniting the two conditions of being in such a state that it may be directly assimilated, and at the same time at the lowest possible degree of oxydation.

The hypophosphites of soda and lime are the combinations which hitherto seem best to fulfil these two requisites. They may be given in doses varying from ten grains to one drachm in the twenty-four hours. The highest dose which I have been in the habit of giving to adults is twenty grains.

The effect of these salts upon the tubercular diathesis is immediate, all the general symptoms of the disease disappearing with a rapidity which is really marvellous.

If the pathological deposit produced by the dyscrasy is of recent formation, if softening has only just set in and does not proceed too rapidly, the tubercles are absorbed and disappear; when the deposit has existed for a certain time, when the softening has attained a certain degree, it sometimes continues in spite of the treatment, and the issue of the disease then depends upon the anatomical condition of the local lesion, on its extent, and upon the existence or non-existence of complications. The author has made numerous attempts to modify the local condition of the lungs by the inhalation of different substances, but has never obtained any satisfactory result independent of what was to be attributed to the specific treatment. The hypophosphites of soda and lime are certain prophylactics against tubercular disease.
The physiological effects which he has observed to be produced by the use of the hypophosphites of soda, lime, potash and ammonia, show these preparations to have a two-fold action. On the one hand they increase the principle, whatever that may be, which constitutes nervous force; and on the other, they are the most powerful of häematogens, being infinitely superior to all medicines of that class hitherto known. They seem to possess in the highest degree all the therapeutical properties formerly attributed by different observers to phosphorus itself, without any of the danger which attends the use of that substance, and which has caused it to be almost forgotten as a medical agent. The different preparations of hypophosphorous acid will, according to these views, occupy one of the most important places in the Materia Medica.—[Dublin Hosp. Gaz., and Ranking's Abs't.

The Non-Mercurial Plan of Treatment in Syphilis. Read before the Western Medical and Surgical Society. By Dr. CAHILL.

He commenced by narrating a number of cases in which the constitutional effects of syphilis had been very severe, and had extended, in spite of treatment, through many years, in all of which the early stage of the disease had not been attacked by mercury. After detailing these very carefully, he entered into the history of this plan of treatment, remarking that most of the Irish surgeons who had adopted it have since changed their opinions respecting it. He maintained that the severest and worst forms of constitutional syphilis occur when no mercury whatever has been given for the primary disease, and that the notion that the severe cases of secondary disease are mainly due to the mercury administered is not founded in fact. Mercury, to be of use, must be persevered in for at least six weeks, and to produce its good effects need not to be given lavishly or recklessly. If attention be not paid to this fact, no permanent effect is produced, and other forms of the disease, as secondary or tertiary, are apt to follow immediately after. He recommended the use of the bichloride in doses of one-twelfth to a quarter of a grain, together with the inunction of the strong mercurial ointment, until the gums showed that the system was affected by the mercury. The bichloride is borne better than any other form of mercury, and can be continued with safety longer than any other mercurial preparation, not only in these cases, but even in scrofulous diseases, in which its use is advisable; hence its peculiar value. Iodide of potassium, given with iodine, is the next remedy to be relied upon, though it is chiefly valuable in secondary and tertiary affections of the periosteum. In tertiary symptoms, the iodide is our sheet-anchor, and mercury
should never be given in such cases to the extent of producing its specific effects; should a mercurial be required, the hyd. c. creta is to be recommended in conjunction with the iodide of potassium. Iron, arsenic, and mineral acids, under certain circumstances, are useful, especially after mercury has been fairly tried; these, with the ordinary means of restoring health, as good food, pure air, and rest, will generally promote a cure. He then alluded to the difficulty of distinguishing primary chancre, and the means employed by inoculation, and the peculiar hardness, of the true Hunterian chancre, and to the chance there was of a chancre in the urethra being overlooked, and to other sources of error as to the curability of syphilis without mercury. He concluded with the following observations:

1st. That the severest and most prolonged forms of the disease have arisen where no mercury has been given for the primary or early secondary affection.

2ndly. That as no symptoms identical with those of constitutional syphilis are produced by mercury, the notion that mercury is a cause of constitutional syphilis is founded in error.

3rdly. That the administration of mercury may be so regulated as to preclude any of its severe effects; and supposing any are produced, it is manifest that they would be less severe than those caused by constitutional syphilis.

4thly. That the constitutional effects of mercury should be avoided in tertiary syphilis.

5thly. That the supposed successful treatment of syphilis without mercury is founded on erroneous diagnosis, or the cases have occurred in individuals already protected, or the subjects have been of that class who seem to enjoy immunity from the worst part of the complaint.—London Lancet.

Pathology of Convulsions, with especial reference to those of Children.
Read before the North London Medical Society. By Dr. Reynolds (of which the following is an abstract):

I. All vital actions are accompanied by, and depend on, physical changes in the living organism.

II. Modifications of vital action depend on modified physical conditions. Some symptoms of disease are modifications of vital actions, and there are two general modes in which they are, or may be, related to the nutrition-change:

1. Negative symptoms—i.e. those which consist in the negation of vital properties, such as paralysis, anaesthesia, etc.—may depend directly on a "solution of continuity," or some other distinct organic disease; but

2. Positive symptoms—i.e., those which consist in the altera-
tion or excess of vital action—cannot depend directly on such textural condition, but must have for their immediate cause some modification of the minute interstitial processes.

III. Convulsions, being essentially modifications of vital actions, must depend on modifications of physical conditions. Though no "lesion" is discoverable, we are warranted in the conclusion that nutrition is affected.

IV. Convulsions depend on modified nutrition changes in the nervous centres.

V. The proximate cause of convulsions is the same in all cases when the convulsions are the same; and the lesions discovered in the nervous centres or elsewhere are not the proximate causes of convulsions, for they differ in locality and kind, and have no constant proportion to the symptom in question.

VI. The proximate cause of convulsions is an abnormal increase in the nutrition changes of the nervous centres—an increase in relation to time or to mobility.

VII. The remote causes are such as induce the abnormal increase. There are three general modes in which these causes operate:

1. The nervous centres may be involved in a general nutrition change—e.g., as during dentition, at puberty, in Bright's disease, scrofulosis, rickets, etc.
2. The nervous centres may be the seat of special disturbance, owing to organic lesion, as tumour, spiculae of bone, etc.
3. Eccentric irritations may affect their nutrition through different nerves.

VIII. The diagnosis in convulsions is that of the remote cause, and the first step is to ascertain to which of the above three categories the case belongs. In children, the diagnosis will turn on:

1. The duration of the paroxysm;
2. The frequency of its repetition;
3. Its local or general distribution; and,
4. Interparoxysmal symptoms.

The last are of the most value; and the positive or negative character of the symptoms, together with local distribution, afford material assistance in this process.

IX. The treatment of convulsions is guided by the diagnosis, and will consist in the removal or palliation of eccentric irritations, the improvement of general nutrition, and the treatment of local disease.—[Ibid.]
EDITORIAL AND MISCELLANEOUS.

PACIFIC MEDICAL AND SURGICAL JOURNAL.—We have just received the first issue of this new journal. The present number, in the character of its papers, its style, and typographical execution, gives promise of this new comte to our sanctuary, being a most valuable addition to the medical literature of the country. "Every civilized nation," to use the language of its Editors, "has sent some of the boldest and most enterprising of her medical scholars, to earn fortunes and fame from the babel population of California. In this city, besides numberless American, English, French, German and Italian physicians, there are medical savans of the Mongol race, who practice both surgery and medicine." Therefore, we repeat, this journal must become an important exponent of a variety of medical opinion, and we look forward to its future success with much interest. The work is edited by John B. Trask, M.D., and David Wooster, M.D. It is published monthly, at San Francisco, California, at five dollars per annum, and the editors are also the publishers.

We take great pleasure in placing this new member upon our Exchange List, and in welcoming its editors, cordially, into the fraternity of journalists.

A Manual of Medical Diagnosis: being an Analysis of the Signs and Symptoms of Disease. By A. W. Barclay, M.D., Cantab et Edin. Fellow of the Royal College of Physicians, Assistant Physician to St. George's Hospital, etc., etc. Philadelphia: Blanchard & Lea. 1858. Pp. 423, 8vo.

In the circle of attainments necessary to constitute the rational and reliable practitioner, no one of them is more important than a correct and philosophical system of diagnosis. Without it, all treatment is empiricism, every measure, a bare assumption, and Therapeutics itself but a guess. Of works exclusively devoted to this important branch, our Profession has at command, comparatively, but few, and, therefore, in the publication of the present work, Messrs. Blanchard & Lea have conferred a great favor upon us. Dr. Barclay, from having occupied, for a long period, the position of Medical Registrar at St. George's Hospital, possessed advantages for correct observation and reliable conclusions, as to the significance of symptoms, which have fallen to the lot of but few, either in his own or any other country. He has carefully systematized the results of his observation of over twelve thousand patients, and by his diligence and judicious classification, the Profession has been present-
ed with the most convenient and reliable work on the subject of Diagnosis, that it has been our good fortune ever to examine.

We dislike to recommend any book, except a dictionary as "a book of reference," for no author can ever obtain his full meed of consideration, unless he is read diligently through—page by page: but we are aware that in the present unavoidable relations of the practitioner to the Science of Medicine, this "reference" phase of a book, is ever a recommendation; we can therefore say of Dr. Barclay's work, that from his systematic manner of arrangement, his work is one of the best works "for reference" in the daily emergencies of the practitioner, with which we are acquainted; but, at the same time, we would recommend our readers, especially the younger ones, to read thoroughly and study diligently the whole work, and the "emergencies" will not occur so often.

To Readers and Correspondents.—We have on our table, many other valuable works, pamphlets and communications, kindly sent us by publishers and correspondents. The notices of these, together with other important editorial matter, have necessarily been excluded from our present number, on account of the engrossing duties imposed upon us at this season, by our relations to the Medical College of Georgia. Still, it will be seen that, we have done some work for the present issue, as the original and eclectic department will show.

Professor Means.—As in the January number of this journal, we announced that our friend, Professor Alexander Means, had resigned the Chair of Chemistry in the Atlanta Medical College, we now state that Professor Means has subsequently withdrawn that resignation, and, therefore, retains his connection with that institution.

Professor Means has since, resigned the Chair of Chemistry and Pharmacy in the Medical College of Georgia.

The candor of Professor Syme, in making this correction through the London Times, is truly commendable and worthy of imitation, by all members of our profession, under like circumstance. There is true manliness in it.

An Excision of a Man's Tongue.—The following letter has been addressed, by Professor Syme, to the editor of the Times: "I regret to learn that an operation which I happened to perform in the Royal Infirmary of Edinburg has got into the newspapers; but as it has unfortunately done so, the public should be correctly informed on the subject. Partial removal of the tongue, for the remedy of Cancer, having been found worse than useless, it was thought that extirpation of the whole organ might afford effectual relief; upon this principle I proceeded. The pa-
tient suffered no bad consequences directly from the operation; but at the end of a week, when the external wound was quite healed, died suddenly from an internal disease, which might have been excited by any other irritation in a person of his constitution and habits."

**Novel Method of Extracting a Foreign Body from the Oesophagus.**—We have before us, in the pages of the Boston Medical Journal, an account of an extremely ingenious and novel method of extracting a foreign body from the oesophagus, by Dr. David Rice. "Mrs. Field, a lady aged 70, while eating chicken soup, accidentally swallowed a piece of bone the size of an American quarter of a dollar, cut into a triangular form. The bone lodged in the oesophagus, about two inches below the top of the sternum. Thinking that it might fall into the stomach, she neglected to apply for surgical aid, until the fifth day after the accident. In the mean time, she had swallowed neither food nor drink, both regurgitating back into the mouth with every attempt to do so."

The Doctor was called on the fifth day, but was unable to remove the foreign substance by any instrument which he had at his command. He finally took a piece of sponge of such a shape, as when dry, to fill about half of the tube, and introduced it rapidly in a dry state, then, by introducing a little water into the mouth, the sponge became moistened, and enlarged it to twice its natural size, completely filling the gullet. On drawing it out the bone was brought with it, much to the gratification of patient and practitioner.

There is a certain readiness of invention and expedient which is necessary to a surgeon, and without which he will often be nonplused and harassed. The same means cannot be applied to every case, and common sense, with a share of ingenuity, frequently is all that is necessary to overcome difficulties which seem to be very great. It is desirable to have in our minds the expedients which have been resorted to by others in difficult cases, for we are liable at any time, to have a case to which they are precisely applicable. We conceive that this mode of swabbing the gullet from below upward, by introducing a dry sponge below a foreign body, allowing it to imbibe moisture and then withdrawing it, might be applicable to a great many cases where the substance could not be removed by other means.—*Buffalo Med. Journal.*

[We add, from memory, to the above, a very ingenious device of Dr. E. Leroy Antony, of Georgia, for removing a certain kind of foreign body from the throat. The patient by some means had swallowed a *fish-hook*! (what will *not* people swallow!) it had passed out of reach and became fixed in the gullet by the barbed end, in the efforts of the patient to relieve himself by pulling at the line which was attached to the hook and hung out of the mouth. Dr. A. removed the foreign body by passing a *drilled bullet* down the oesophagus upon the line, which, when it arrived at the hook-end, disengaged the barb, and protected the soft parts from being wounded with it, during its removal from the
throat. As Dr. Flint remarks, "it is desirable to have every possible expedient in our mind"—this last is also one which certainly deserves recording and recollecting.]

**Surgery in San Francisco.**—Dr. E. S. Cooper, of this city, has recently ligated the primitive carotid artery in two cases,—the external iliac in one, the axillary in one, removed a large fibro-cartilaginous tumour from the uterus; made the Caesarian section in one; exsected parts of three ribs, and removed a foreign body from beneath the heart; exsected the sternal extremity of the clavicle and a portion of the summit of the sternum; together with the exsection of nearly all the joints, in different cases, all successfully.

This embraces a list of formidable operations, which, being attended with favorable results, are worthy of note. This uniform success in operations of such magnitude, must, in part, be attributed to the effects of our climate, which, for the recovery of patients after receiving serious injuries, is, at least, unsurpassed in any part of the world.

There have been many other capital operations successfully performed in various parts of this State, which we are unable, for want of data from the operators, to specify. There is no country in the world, where, in the absence of war, mutilation and deformities from injuries are so common and so serious, as in California; and it is not, therefore, remarkable that our surgeons have opportunities of practice which can be found only in the hospitals of other countries.—[*Pacific Med. and Surg. Journal.*]

**On the Temperature of the Body in Intermittent Fever.** By Dr. S. Th. Michael.—These observations were made in different types of intermittent fever, and repeated at intervals of five minutes, so as to determine with exactness the precise variations of temperature.

Their result is that the temperature begins to rise at the rigor, and rises by slow degrees; and that after this it falls by slower degrees, and with intermissions. At the commencement of the rigor, and at the end of the period of sweating, the temperature is below the natural standard, sometimes to the extent of some degrees, sometimes to certain portions of a degree.

In the majority of cases, the maximum elevation was between 32° and 33° Reaumur, rarely below, more frequently above. The highest point ever attained was 33.4 Reaumur.

After the administration of sulphate of quinine the temperature did not attain to the same degree of elevation as previously; and during convalescence it remained below the normal standard, or only occasionally became raised to the fraction of a degree above it.—[*Archiv für Physiolog. Heilkunde.*] **Ranking's Abstract.**

**Glycerine in Corns.**—These troublesome things Mr. Wakley is in the habit of treating, at the Royal Free Hospital, by the application of glycerine, which has the effect of softening them, when they are easily scooped out. We saw as many as seventeen corns entirely removed in twelve days in this manner.—[*London Lancet.*]
“On the Signs of Pregnancy.”—It seems strange that Dr. Montgomery should have deemed it necessary to write so elaborate a treatise on this subject, when the old sage of Cos summed up the whole matter in three lines. Thus, in the 41st Aphorism of Hippocrates, we find the following:

“If you wish to know whether a woman is pregnant or not, instead of supper, give her hydromel (water impregnated with honey) at bedtime; if she experiences griping pains in the abdomen, she is pregnant; otherwise, she has not conceived.”

Hippocrates, in another place, refers to a matter of some importance in its bearings on the duration of pregnancy. He states that his own father knew not his mother for two years before his birth! We believe that the Roman law was somewhat liberal in cases of protracted gestation, but the Greeks must have had some very peculiar notions on the subject, if they ranked the birth of this reputed 15th lineal descendant of Aesculapius (the latter, son of Apollo,) among the legitimate!—[Western Lancet.]

Rev. Sidney Smith on Hay Fever.—In a letter to Dr. Holland, the eccentric Dean of St. Paul, thus gives his personal experience in this complaint:

“I am suffering from my old complaint, the hay fever (as it is called.) My fear is, perishing by deliquescence; I melt away in nasal and lachrymal profluvia. My remedies are warm pediluvium, cathartics, topical applications of a watery solution of opium to the eyes, ears, and the interior of the nostrils. The membrane is so irritable that light, dust, contradiction and absurd remark, the sight of a Dissenter—anything—sets me sneezing; and if I begin sneezing at twelve, I don't leave off till two o'clock, and am heard distinctly in Taunton, when the wind sets that way—a distance of six miles. Turn your mind to the little curse. If consumption is too powerful for physicians, at least they should not suffer themselves to be outwitted by such little upstart disorders as the hay fever.”—[Ibid.]

Anæsthesia by “Projection.”—To avoid the accidents due to excessive inhalation of the anesthetic agent, and especially to insure that the material should be mixed with the requisite amount of air, Dr. Heurteloup, known in surgery for the invention of Lithotripsy, has contrived an apparatus for this end, (having in his experiments made use of chloroform). The apparatus is like a syringe with a small bellows for throwing in air in place of the piston, and having a gauze partition on which the chloroform is poured. The working of the bellows throws a steam out of the small end in a jet, which contains more or less chloroform, according as the discharging tube is brought more or less near to the bellows. The jet is established only on working the bellows, and there is no waste of chloroform during the operation.—[American Jour. of Sci. and Arts.]

Incontinence of Urine.—M. Trousseau seems to have most unbounded confidence in the efficacy of Belladonna in the treatment of incontinence of urine. A girl at 19, entered the hospital, who voided her
urine two or three times during the night. He commenced with 1 centigramme (gr. 1.543 Troy) of the extract, and in the course of a few weeks, increased the dose to 18 centigrammes. He insists upon the continued use of the medicine for several months after the incontinence had ceased, as a return of the difficulty may otherwise be anticipated.

[Western Lancet.

A New Property of Camomile.—Camomile (anthemis nobilis) is described in all treatises of materia medica as emollient, digestive, fortifying, &c., but none point out a most precious virtue, just announced as pertaining to it by M. Ozanam, whose paper on the subject was presented to the Academy of Sciences at its last sitting by M. Cloquet. This virtue consists in preventing suppuration when the local disease is not too far advanced, and in gradually stopping it when it has existed for a long time. For this purpose it is administered in powerful doses of five, ten, and even thirty grammes of the flower in a litre of water, the infusion to be drunk in the course of the day, and to be continued until the cure be effected. Compresses moistened with the infusion may be locally applied; they aid in the cure, but are not necessary—the infusion alone taken internally, being quite sufficient. In support of his assertion, M. Ozanam quotes a number of cases in which this mode of treatment was successful.—[London Times.

On the use of Manganate of Potass as a Caustic in Cancer. By Mr. Weedon Cooke.—Mr. Weedon Cooke speaks highly of manganic acid, in combination with potassa as a base, as the caustic in the treatment of cancer. It produces, he says, much less pain than any other caustic, and no ill-consequences of any kind. It is a dark-green powder, which may be dredged on the ulcerated surface by means of a pepper-caster.

[Lancet.

Duration of Cancer.—A case of some interest presented itself at the Cancer Hospital, on the 25th of August, in the person of a female, aged seventy-four years, the subject of cancer of the left breast for twelve years. She had been a patient at this hospital since its foundation, with this exception of the last three years, during which time she had been in good health. She came to show an ulcerated tuberculous mass in the same breast, the size of a small pear, otherwise the disease has dried up and disappeared. She still looking a hale and hearty old woman.—[Ib.

Medical Journals in the United States.—We think there is a growing disposition to lessen the number of our medical journals—to improve their quality—and a decreasing disposition to publish them for nothing! We observe a manifest improvement in the tone and character of almost all our exchanges, and we notice that several have already raised their price: we think these features in our journalism are proper and commendable. Medical periodicals, if published at all, must be paid for in some way—and if afforded to subscribers at a price actually less than the paper and printing cost, somebody must make up the deficit. Now this can very readily be afforded sometimes, by parties who have special
interests to advance, just on the same principle that we get a flood of almanacs annually thrust under our doors gratis, for the sake of calling our attention to their author's individual skill, or wonderful nostrums; but we doubt if the true interests of legitimate medicine are to be advanced by the publishing of our journals on such principles.

[Cincinnati Lancer and Observer.

Artesian Wells in Sahara. (Athen, No. 1562.)—The Moniteur Algerien brings an interesting report on the newly-bored Artesian wells in the Sahara Desert, in the province of Constantine. The first well was bored in the Oasis of Oued-Rir, near Tamerna, by a detachment of the Foreign Legion, conducted by the engineer, M. Jus. The works were begun in May, 1856, and, on the 19th of June, a quantity of water of 4,010 litres per minute, and of a temperature of 21° Réaumur, rushed forth from the bowels of the earth. The joy of the natives was unbounded; the news of the event spread towards the South with unexampled rapidity. People came from long distances in order to see the miracle; the Marabouts, with great solemnity, consecrated the newly-created well, and gave it the name of "the well of peace." The second well, in Temakin, yielded 35 litres, of 21° temperature, per minute, and from a depth of 85 metres; this well was called "the well of bliss." A third experiment, not far from the scene of the second, in the Oasis of Tamelhat, was crowned with the result of 120 litres of water per minute. The Marabouts, after having thanked the soldiers in the presence of the whole population, gave them a banquet, and escorted them in solemn procession to the frontier of the Oasis. In another Oasis, that of Sidi-Nached, which had been completely ruined by the drought, the digging of "the well of gratitude" was accompanied by touching scenes. As soon as the rejoicing outcries of the soldiers had announced the rushing forth of the water, the natives drew near in crowds, plunged themselves into the blessed waves, and the mothers bathed their children therein. The old Emir could not master his feelings; tears in his eyes, he fell down upon his knees, and lifted his trembling hands, in order to thank God and the French. This well yields not less than 4,300 litres per minute, from a depth of 54 metres. A fifth well has been dug at Oum Thior, yielding 108 litres per minute. Here a part of the tribes of the neighborhood commenced at once the establishment of a village, planting at the same time hundreds of date-palms, and thus giving up their former nomadic life. The last well is that of Sheggga, where soon an important agricultural centre will spring up. There is no doubt but that these wells will work in these parts a great social revolution. The tribes which, after the primeval custom of their ancestors, kept wandering from one place to another, will gather round those fertilizing springs, will exchange the herdsman's staff for the plough of the farmer, and thus take the first steps towards a civilization, which, no doubt, will make rapid progress in Northern Africa.—[American Jour. of Science and Arts.

The Boston Transcript says, the following by Oliver W. Holmes, is the finest simile ever written: "The mind of a bigot is like the pupil of the eye; the more light you throw upon it, the more it contracts."