THE
SOUTHERN MEDICAL
AND
SURGICAL JOURNAL.

VOL. III.

A TRULY VIRTUOUS WILL IS ALMOST OMNIPOTENT.

EDITED BY

MILTON ANTONY, M. D.

Professor of Obstetrics, &c. in the Medical College of Georgia.

AUGUSTA, GA.
Printed by Guion & Thompson.
McIntosh-street.
1839.
An Essay on Congested Fever. Presented to the Faculty of the Medical College of Georgia, at the Annual Commencement in March, 1839. By Wm. M. Burt, of Edgefield, S. C., a candidate for the Doctorate.

[The frequency of occurrence, extensive progress and dangerous character of the fevers, which have, of late, been known by the name "congestive," impart great interest to everything calculated to diffuse a knowledge of the disease. Essays and observations on the subject, from those of the south under whose notice it has been most abundant, have been repeatedly, but in vain called for—some have been promised, but none have come to hand; and now, a premium is offered by the Medical Society of Augusta, for the purpose of drawing forth the best information on the subject for the benefit of the public. Meanwhile, we seize on the present opportunity of laying before the public a very faithful and accurate, though brief view of this disease, as it has appeared in an adjoining district. We regret that it has not been in the power of the promising author, to give the autopsic appearances which follow congestive fever. This, however is not to be expected to any extent, of those whose observation is limited to country practice.]
As there are few diseases which I conceive to be of more importance, or which afford more room for original speculation than Congestive Fever, I have ventured to select it as the subject of my thesis. But it is with hesitation I undertake its exposition, as I am perfectly aware of my incapacity to do justice to a subject of such vast importance. I shall, however, endeavor, in a cursory manner, to present my views with regard to the character and causes of the disease which has prevailed in Edgefield District, S. C., for the last two or three years under the above name, and then relate the mode by which I have known it most successfully treated. With regard to the nature of this, as of many other diseases of malignant character, physicians appear to entertain a variety of conflicting opinions; some believing it to be a modification of one, and some of another disease; no two, so far as my inquiry has extended, appearing to be alike in their belief. This we may, however, expect will continue to be the case, until a series of post-mortem examinations shall have revealed to the world its true pathology.

As to my own part, I am convinced, at least, so far as the external phenomena enables me to judge, that it is a species of fever, differing in some respects from any other which had existed among us previous to its invasion; and that it depends primarily on congestion of the capillary vessels of some portion of the mucous membrane of the alimentary canal, most generally that of the ilium or small intestines.

On account of this local congestion, the equilibrium of the circulation becomes destroyed, and the sanguiferous system brought into a state of febrile re-action. The blood is then forced upon this morbid membrane by the increased action of the heart and arteries, and a new set of phenomena are produced, indicating more conspicuously the presence of intestinal irritation; which, in attacks of extreme violence, spreads by continuity of surface or otherwise, until it has even reached the œsophagus.

The mucous membrane of the lungs also appears to be often involved in the disease, which renders it much more perplexing to the practitioner, and by far more liable to be attended with fatal consequences.

**Symptoms.—** The symptoms characterising congestive fever, vary according to the extent and location of the affection; and
Congestive Fever.

therefore cannot be satisfactorily delineated without considering it under two varieties, the mild and the malignant; the former of which, I believe, depends in all cases, upon functional derangement of the capillary vessels of the mucous coat of the ilium; which opinion, I trust, will be rendered somewhat justifiable, by pointing out the characteristic symptoms of this variety of the disease.

An individual, previous to an attack of congestive fever in its mild form, will sometimes for days and even weeks, experience a loss of appetite, and even the small quantity of food which he takes will be imperfectly digested; his bowels become irregular in their action, being sometimes constipated, and at other times preternaturally relaxed. There is extreme languor, especially in the after part of the day, most generally attended with sensations of chilliness, which are succeeded by a slight increase of pulse and drowsiness. After these premonitory symptoms have continued for an indefinite length of time, the individual is taken with a decided chill, which also varies in duration, and from which the system gradually passes into a state of re-action, which, in some cases, is so very slight, that one unacquainted with the nature of the disease, might be induced to believe for a short time, that the patient did not require medical attention. But by close observation, he will soon become convinced of his error with regard to the transientness of the symptoms. The patient's pulse, though not increased in fulness, remains frequent and rather tense, the surface of his body becomes dry and rather shrunken, except about his neck and forehead, where a slight moisture is found almost invariably to exist throughout the whole course of the disease. He does not complain of any pain under ordinary circumstances, but if pressure be made upon the abdomen just below the umbilicus, he will experience obtuse pain or soreness in the bowels. His tongue invariably assumes a red color along its edges and tip; having in almost all cases a streak of dirty white fur in its middle. His appetite is most generally wanting, or very much impaired, though in some rare cases it is exceedingly voracious, an instance of which I have seen, and in this case the patient's tongue, instead of being of the usual color along its middle, presented an aspect approaching very nearly that of indigo. There is generally considerable thirst present, but the patient appears to be indifferent with
regard to the temperature of the fluids given him, taking them warm or cold without complaint. His urine is diminished in quantity and rather more highly colored than natural. His bowels are apt to remain irregular in their action—diarrhoea being easily excited; his strength is quickly exhausted, and his extremities liable to become cold, especially in the morning. Sometimes towards the third or fourth day, the abdomen becomes slightly tympanitic, more especially if drastic purgatives have been freely used at the commencement of the attack.

Without proceeding farther with the history of this form of the disease, I would remark that it seldom, if ever, proves fatal, provided a judicious plan of treatment be pursued from the commencement; although it frequently runs on without much alteration for the better or worse, until the fortieth day. But the usual period at which it terminates is about the twentieth day.

Having thus briefly considered what I have ventured to denominate the mild form of congestive fever, I will now pass to the history of the disease in its malignant form; which, although not so abrupt in its attack or altogether so rapid in its progress, is, I presume, little less to be dreaded than Asiatic cholera or yellow fever. Still I am inclined to think that future investigation will divest it of many of its terrors, by proving that one grand cause of practitioners having heretofore been so uniformly unsuccessful in its treatment is this: diseases previous to its invasion had for a long time observed an uniform character; hence arose an uniform and unalterable plan of treatment, which could not prove otherwise than pernicious in a disease like the one under consideration. I do not wish it inferred that I entirely condemn the use of purgatives in this disease, but only their injudicious employment. And thus I apprehend many individuals have been precipitated into an untimely grave by erroneous treatment, rather than by a disease necessarily uncontrollable in its nature.

 Symptoms.—The symptoms characterising the malignant form of congestive fever, are much more conspicuous than those already described. The febrile heat is much more intense, the pulse more voluminous, and incompressible; there is considerable nausea with vomiting, most generally attending at the commencement, with other signs of gastric irritation, such as a sense of burning and oppression in the epigastric region; the breath-
Congestive Fever.

ing is short and very much hurried; the patient complaining of considerable uneasiness in the chest, and having a dry cough, his thirst is most insatiable, with a desire for the coldest drinks; his tongue is of a fiery red color, presenting a smooth or polished surface; indeed so uniformly does this redness of the tongue accompany the disease, that it received, and still retains among the common people the name of the red tongue fever, which is very characteristic of it. The individual is extremely restless, tossing himself from one side of the bed to the other; his bowels are generally constipated at the commencement of the attack and sometimes very obstinately so, resisting the action of cathartics surprisingly; and in such cases when they once yield, their whole contents appear to be passed off at one discharge. His urine is scanty and very high colored, being passed sometimes with more or less pain. As early sometimes as the second day, the patient will complain of great intolerance of light, and a sense of fulness in the head; his abdomen is apt to become turned, and when the disease is going on to a fatal termination deglutition becomes difficult, a low delirium supervenes, and the discharges both by urine and stool are passed involuntarily. A copious secretion of white, frothy, and extremely tenacious mucous is thrown off by the bronchial tubes, a most profuse perspiration breaks out over the whole surface of the body, the extremities rapidly grow cold, the countenance assumes a cadaverous aspect, the pulse generally intermits, or ceases to be felt at the wrist, and at this extreme period, the mucous secreted by the bronchial tubes becomes so abundant as to produce suffocation, and thus put an end to the patient's indescribable sufferings.

The period at which the crisis generally takes place, is on the fourteenth or fifteenth day, and when it occurs short of the ninth, death, I believe, invariably follows.

Causes.—The causes which conspire to raise congestive fever, appear to be quite numerous and diversified. Among them may be enumerated, sudden suppression of cutaneous transpiration, thereby producing a determination of blood from the surface to the internal organs. Taking a draught of cold water while excessively warm, will sometimes produce the disease in its most terrific form. In this case, I presume, the morbid impression produced on the nerves of the stomach by
the cold water, is transmitted through the medium of the senso-
rion commune, to the cutaneous exhalents and capillaries; which
occasions not only the retention of a large quantity of perspira-
ble matter, but a constriction of the extreme vessels, thereby
causing the blood to accumulate in the internal organs. The
disease may also be produced by exposure to a cold and humid
atmosphere, especially at night. Standing long upon wet ground,
sleeping in wet clothes, eating of indigestible food, such as un-
ripe fruit. Miasmata also appears to be one of the most fruitful
sources of congestive fever, of which I think I could adduce
ample evidence were it necessary. But how this aerial morbid
agent operates in producing its deleterious effects upon the sys-
tem, I shall not pretend to say. In short all agents may predis-
pose the system to congestive fever, which are calculated to de-
range the functions of the body, by producing hyperoemia of
the mucous surfaces.

Treatment.—In the treatment of congestive fever, our grand
object is to equalize the circulation, restore the natural functions
of the excretory organs, and obviate inflammation. For the ac-
complishment of this, our agents must be adapted to the
degree of violence the disease assumes: for instance, general
bloodletting is seldom required in the mild form of the disease,
and when employed, it should be at or soon after the commence-
ment of the febrile symptoms, and when the bowels are in a
state of constipation, and the pulse resisting. Under these cir-
cumstances, it may be productive of good by diminishing the
force and frequency of the pulse, and rendering it more volu-
mous, and also by assisting the action of such remedies as may
be administered for the purpose of evacuating the alimentary
canal, and promoting diaphoresis. As the powers of re-action
in the system are generally feeble from the commencement of an
attack, I would here remark, that venesection should always be
resorted to with a great deal of circumspection, lest permanent
debility be the result. With regard to the beneficial effects of
purgatives in this as well as in the malignant form of the dis-
ease, a great deal depends on the nature of the articles employed;
for example, drastic purgatives are always liable to be attended
with the most dangerous consequences, producing great irrita-
tion in the bowels, and excessive purging. Hence the mildest
articles belonging to this class should always be selected.
When at the commencement of the febrile symptoms the bowels are constipated, purgatives are indispensable, and those too, which are calculated to produce thorough evacuations; for it is quite evident that the retention of fecal matter, or any vitiated secretion in the bowels, would constitute a prolific source of irritation. For this purpose, I know of no remedy in the materia medica, which is preferable to calomel and Dover's powder combined, and followed by castor oil in the course of a few hours. After the bowels have been evacuated by this means, they should be kept open by the occasional use of some mild aperient, or injections of warm water.

Should signs of intestinal inflammation or colliquative diarhoea ensue, small and repeated doses of the pulvis ipecacuanha compositus should be given. Leeches or cups should be applied to the abdomen, and followed by emollient poultices, for the purpose of promoting the discharge of blood, and also assisting in producing a more decided revulsive effect.

The patient's diet should be strictly antiphlogistic at the commencement, consisting of mucilaginous drinks altogether. But as the disease is one of long duration, the diet should be rendered more nourishing as soon as practicable. As often as the extremities sink below the natural standard of temperature, epistomas or sinapisms should be applied. The malignant being much more formidable in its nature than the mild form of congestive fever, necessarily requires a more energetic plan of treatment, and as there are often at the very commencement of the attack, marked signs of gastro-intestinal irritation, together with a disposition to cerebral congestion, we at once conclude, that general bloodletting is a most important means for arresting the progress towards inflammation. The blood, in such cases, should be drawn from a large orifice, and the operation repeated until a decided impression be produced upon the pulse, or until we have reason to doubt the propriety of its use. In the meantime a blister should be applied to the epigastrium, and the head kept cool by means of a bladder containing ice, or clothes rung out of cold water. When by these means the vomiting has been arrested, and the action of the heart and arteries moderated, small doses of calomel combined largely with opium or the sulphate of morphia should be given at proper intervals, and followed by oil or some of the saline preparations. Pro-
vided the means prove too energetic in their operation, producing copious watery discharges, and the patient's strength fail rapidly, blisters should be applied to the extremities with a view of keeping up excitement, and the black drop administered for the purpose of arresting the discharges from the bowels. The patient should be allowed the free use of cold mucilaginous infusions at all times; all irritating or solid articles of food being avoided: for I am confident there is no disease in our southern country, in which more can be effected by a proper regulation of diet, than in the one under consideration.

In all cases where tympanites occurs, cups; or leeches, which I consider preferable, should be applied to the abdomen, and their application succeeded by warm poultices. In the latter stage of congestive fever, our treatment should consist of means the most simple in their nature, such as mild aperients, for the purpose of keeping up regular and moderate discharges from the bowels, with the occasional use of some innocent diaphoretic. Frictions should be frequently applied to the surface of the body, in order to equalize the circulation, and the natural temperature of the extremeties sustained by stimulating cataplasms.

During convalescence from this disease, the strictest regard should be paid to the patient's diet. Mild farinaceous liquids are generally quite sufficient for several days after the subsidence of the fever.
ARTICLE II.

An Essay in answer to the question, "What is the pathology and treatment of Cholera Asphyxia," read before the Medical Society of Augusta. By Edward A. Eve, M. D., of Richmond County, Geo.

The importance of the subject for our consideration is so well established, and generally acknowledged, that it is altogether unnecessary to endeavor to impress it on the present occasion; therefore we will proceed at once to examine the question or questions before us—"The Pathology and Treatment of Cholera Asphyxia." Although the generic name—cholera—is inappropriate and calculated to convey imperfect and erroneous ideas of the true pathology, the symptoms of "cholera asphyxia," Asiatic, or spasmodic cholera, (the species designed for discussion this evening,) so readily occur to the mind of every physician, that a regular detail of them in this place would be superfluous, and such only as may be required to substantiate or elucidate principles shall be adverted to in the course of the following remarks. The object of the present discussion being to elicit truth, it has been my aim in examining the different theories promulgated by different authors, to adopt and support such as seems the most rational, and best sustained by facts in possession of the profession, rather than coin a new one, whose only recommendation might be its novelty: still, as the same evidence makes a different impression on different minds, in the spirit of the familiar motto, "addictus jurare in verba magistri nullius." I will take the liberty of only adopting such parts of a theory as are consistent with my views, physiologically and pathologically considered, and of rejecting the rest, however respectable the authority from which they emanate. In the rapid review of the doctrines of the pathology of cholera, that I have taken, I cannot account for the very different views that authors of equal celebrity and equal opportunities of observation, have advanced, unless it is that they have founded their doctrines on the phenomena existing in different stages of the disease. It can be from this cause alone, that we have it styled
on one hand a disease of high excitement, requiring active de-
pletion, and on the other, one of most perfect prostration, de-
manding powerful stimulants. - Now avoiding either extreme,
hoping to steer a safe and correct course between them in the
humble attitude of an eclectic, I have endeavored, after a survey
of the different theories that have been erected on this subject,
to gain from each some fact that may be valuable in the forma-
tion of one that can derive its support from its accordance with
the symptoms, the only external and visible signs of the inter-
nal, and invisible ravages of disease before death, and the struc-
tural lesions apparent upon post mortem inspection, which bear
witness of the truth of those external signs which before were
only uncertain indications of the internal condition. We admit
that neither the symptoms, nor post mortem appearances, taken
separately, can develope the true nature of disease; but when a
due correspondence can be established between these indices,—
that is, when we can predict by the symptoms what structural
lesions will appear post mortem, and vice versa when we can
tell by inspecting the structural lesions, what the symptoms
were during life; thus reasoning from cause to effect, and from
effect back to cause, our circle of ratiocination becomes com-
plete, and our conclusion attains to the certainty of demonstra-
tion. It is after severe perquisition by these laws, that I adopt
the following views concerning the pathology of cholera—
which are, that it is threefold in its nature, according to the dif-
ferent stages of the disease. The first, or initiatory stage, I
conceive, consists in congestive irritation of the gastro-intestinal
mucous membrane, accompanied by excessive secretion of the
aqueous elements of the blood; this condition of the mucous
membrane has not been inappropriately termed by different au-
thors, secretory irritation, and serous hemorrhage, conjoined
with this state of the alimentary canal, there is great loss of
equilibrium in the circulation, with a centripetal tendency of the
fluids, in obedience to the often quoted axiom, "ubi irritatio, ibi
humorum afluxus." This stage continues for a longer or
shorter period, as the powers of resistance inherent in the sub-
ject attacked, stand in relation to the violence of the attack.
This gradually glides into the second stage, which is character-
ized by the accession of a new phenomenon, the deterioration of
the blood. Very respectable authority, notwithstanding, could
be adduced, who maintain a depravation of the blood to be the proximate cause of this disease; chemical analysis, however, could be brought to disprove the allegation if necessary; but we do not think it "nodus vindice dignus," as the deterioration of the blood that we allude to, can be accounted for satisfactorily by the perdition of its saline and aqueous elements, from the excessive drainage through the mucous membrane, which constitutes the leading characteristic of this disease, leaving it dark, and of a syrupy consistence. This inspissation of the vital fluid, rendering it unfit to permeate the delicate ramifications of the vascular system, is a mountain-like difficulty in the way of the recovery of a cholera patient advanced to this stage; it is a difficulty whose tendency is to increase, as with a self-generative power. The blood deprived of its aqueous elements, penetrates with difficulty the capillaries of the lungs, and in a state unfit to be oxygenized, it being through the medium of the serum that the blood receives its oxygen from the atmosphere. Now this deoxygenated blood stimulates less actively the organs of circulation, and the organs of circulation in turn still more imperfectly bring it in the sphere of oxygenation; thus acting in a perpetual circle of cause and effect, each effect acting in turn as the cause of the next effect. And when in addition to this increasing devitelization of the blood, we recollect that the follicles of the alimentary canal are acting as so many wastegates of vitality, can we wonder that death should be an early result? What, according to our arbitrary division of this disease we designated the third stage, or that of collapse, or approaching collapse, is distinguished by the system of ganglionic nerves being brought within the sphere of morbid association. By this complication, the relation that one organ bears to another being destroyed, the difficulty of recuperation is very much increased—hence the great difficulty we have in this stage of irradiating excitement by any remedial means he can institute; and hence, also, that icy coldness, that so obstinately resists external heat, that would be sufficient to elevate the temperature of the cadaver considerably above the standard of healthy vitality.

Having now given a cursory and very imperfect sketch of our pathological views of cholera, we will in the next place consider the treatment with reference to those views.

Venesection.—This remedy has been variously estimated, ac-
According to the opposite views entertained by different writers on the subject. Of course, those believing in the phlogistic and inflammatory nature of the disease, would esteem it of the first importance. Those, on the contrary, who consider this disease a state of debilitation or sedation, would, in consonance with those views, deprecate it as an agency fraught with danger, and whose direct tendency would be to increase the difficulty under which the patient was already laboring. According to the pathological views that we entertain, venesection, if employed precisely at the proper period, would often exercise a favorable influence. Its chief value is derivable from its power in equalizing the circulation in the onset of the disease, and of moderating the violence of re-action, when too high, in convalescence. Notwithstanding these beneficial effects may sometimes be derived from this remedy, still, the science we have to treat, glides with such rapidity from one stage to another, as to make the general employment of this agent, a doubtful, if not a hazardous practice; topical depletion being a safer, if not a better remedy.

Emetics.—Emetics, if administered in the early stage of this disease, and with judgment, will sometimes be productive of good. Warm salt and water, with the addition of mustard, are preferable to any other.

Counter-excitement.—When we consider the congestive character of this disease, and the centripetal tendency of the fluids, revulsive applications will be esteemed of the highest importance. They should be used in the early stages, for then only we can hope to achieve much; but they should be used also in collapse, as then little else can be done. But notwithstanding counter-irritants, and internal stimulants appear to be our sheet anchor in this moribund state, still, on that account, we must not, as is very often done, apportion the power of the stimulants to the apparent necessities of the patient, any more than we would apply an intense degree of heat to a frozen member. It is from the supposed analogy that this algid condition of the cholera subject bears to a frozen member, that the practice of administering cold water in this affection has arisen; and however abhorrent, at first view, appears the idea of applying cold externally and internally to a patient already affected with the death like coldness attending collapse, still, according to the analogy just alluded to, it is not altogether unreasonable; and no doubt,
if administered with discrimination, in suitable subjects, and in proper stages of the disease, it might be found beneficial. Where thirst, and the sensation of internal heat are very great, iced water taken, internally, and bladders of ice applied to the epigastrium at the same time that the extremities are surrounded with warm applications, would tend powerfully to divert the centripetal tendency of the fluids, and to restore the lost balance of the circulation. Although we believe that this advantage might accrue from the judicious use of cold in cholera, we apprehend, that, from the ultrasm that pervades our profession, far other has been the result; for we find that when the successful employment of cold as a remedy in cholera was announced to the public, not only was it grasped at with avidity, as a hitherto much neglected remedial agent, in this terrible disease, but numerous writers contended for the credit of having previously advocated its employment in this affection; and as a result of this re-action in the mind of the profession, all medicine was withheld, and the poor shivering subjects of collapse were drenched internally with several gallons of cold water in a few hours, and subjected to the affusion of as many bucketfuls in quick succession.

Calomel and Opium.—Although revulsives appear to be indispensable in the treatment of this disease, still, it is to calomel and opium that we look for our chief curative means; whatever other adjuvants we may call in, still they are only auxiliaries, and this valuable alterative, calomel, combined with the sedative power of opium, must form the basis of our treatment. The liver is affected with almost indomitable torpor—the secretions generally are thoroughly deranged, and nothing less than this powerful cholegogue and alterative can be relied upon to change their disordered action, and restore them to a normal state. Besides its suitableness to the pathology of the disease, the success with this remedy when resorted to early, has been such as to justify the confidence that has been reposed in it. When opium, from the irritability of the stomach, cannot be retained, opiate enemata, frequently repeated, offer an invaluable resource; it might be well in almost all cases, to put the patient under the influence of an opiate enema.

Astringents.—The next class of remedies which claim our attention, is that of astringents. These agents from the patho-
logical views we have taken of this affection, are certainly imperiously demanded, although the effect produced, unfortunately, falls far short of the demand and of the promise their therapeutic applicability would sanction. Acetate of lead, from its well known antihemorrhagic power, seems peculiarly applicable to this state of the alimentary canal, so closely resembling that of hemorrhage.

Saline Mixtures.—These remedies administered by the mouth, or as enemata, to supply the aqueous and saline elements of which the blood has been deprived, in this active state of the exhalents, and inactive condition of the absorbents, I cannot conceive would have any useful effect.

Nostrums, catholicons, and antidotes, &c., have been multiplied without number; but each "has strut its hour upon the stage," and sunk into oblivion, unfortunately, only to give place to another; and the more malignant the epidemic has been, with the greater audacity have their certain cures been heralded forth. As it would be an endless task to notice them in succession, we will pass them over with the silence they deserve. Not predicting whether there ever will be, or not, a specific found for this truly terrible and intractable malady, we cannot but come to the mournful conclusion, that it has not yet been discovered; and though we may be able, by the remedial resources we possess, to treat cholera patients to whom we are timely called, and in the less malignant attacks, with considerable success, still, when the attack is malignant, or the patient has reached the stage of collapse before we are called, it matters little what course we pursue, the result being nearly the same in each.

Though about to conclude, there is still one remedy, which, from the interest it excited in its day, I think ought not to be passed over in silence—I allude now to saline injections into the veins; when we take into view the great depeditation the blood sustains of its important elements in this disease, the alteration it undergoes, both in its chemical and physical properties, the former rendering it unfit to perform the vital functions for which it is designed, and the latter by its inspissation incapable of permeating the delicate capillary system, thereby erecting an almost inseparable barrier to recuperation; it is not wonderful that such a deplorable crisis should have suggested the idea of
supplying the loss of these elements, by injecting into the veins fluids as nearly as possible resembling the nature of those lost. This, however, as well as the whole catalogue of other remedies, in most instances has failed; but not, as it were, without winning a smile of approbation for its ingenuity; death has relaxed his grasp, and reanimation has flushed features, a few moments before cold, pale, shrunken, and wearing the signet of death, with the rosy promise of life; but it has been like the last flickering flash of an expiring light, in a moment they were shrouded in the night of death! The general result of this treatment, as we gather from a history of the cases in which it has been employed, has been of this character, a flattering amendment has been produced; but for the most part, the disease has returned with violence, and the patient has in a short time succumbed. We do, however, find a solitary instance or two recorded, where the recovery has been said to be permanent. A better understanding of this treatment, and an improvement, in manual adroitness, acquired by its frequent employment, might, in some measure, enlarge the number of recoveries; but there are practical difficulties, in the way of the operation, sufficient to prevent it from ever becoming generally available as a remedial agent. The introduction of air into the veins alone, would often render the operation abortive. To prove the destructiveness of this accident, which does not seem to be recognised generally, even by physicians, we have but to advert to several well authenticated accounts of surgical operations recently performed, some of which have been very much embarrassed, and others rendered fatal, by this complication. In corroboration, also, of the destructive energy of this agent, when intromitted into the veins, I can adduce an instance, from the little veterinary surgery that has accidentally fallen under my immediate observation. A horse, affected with tetanic spasm was bled, the puncture being small, the blade of a penknife was introduced to dilate the orifice; by this manoeuvre, owing to the dullness of the instrument, the vein was raised out of its natural bed, a peculiar gurgling noise was heard; instantly the animal was affected with a convulsive trembling, and fell dead at my feet; being myself the operator on this occasion, I had the best opportunity of hearing the peculiar noise, and witnessing the effects of the accident. I have brought forward this case,
merely to show one difficulty in the way of the operation; others will occur to the mind of every one who reflects on the subject. Might not the transfusion of the blood of a healthy human subject into the veins of a choleric patient, be attended with a happy effect? We are aware, that for the reasons above stated, this could not be at all times practicable; but, if at all possible, and the effect conservative of life, it would be well, nay, ineffably desirable to have it among our resources.

When we take into consideration the deoxygenated state of the blood as evidenced by the livid plumbaginous hue of the skin, as well as the appearance of this fluid itself, when brought to view, does it not seem reasonable, that, together with using every means to preserve, or if lost, to restore the aqueous elements of the blood, if we were to cause the patient to inhale an atmosphere charged with a greater than usual proportion of oxygen, it might have a happy effect in giving vitality to the languid circulation, and thereby conduce to the recovery of the patient?

With the above suggestions we will bring these remarks to a conclusion; this essay being intended to be decidedly elementary, precludes that entrance into the minutia of the treatment, that would be allowable and necessary in one of a more practical character.
Part II.—Reviews and Extracts.

Observations on the use of Balsam of Copaiba in Diseases of the Mucous Membrane of the Intestinal Canal.—By R. La Roche, M. D., of Philadelphia.

We extract from the pages of the eleventh and twelfth numbers of the 2d volume of the Eclectic Journal, the entire essay of Dr. La Roche, on the use of balsam copaiba in diseases of the mucous membrane of the intestines, because it is calculated to bring before the practitioner a much neglected, but valuable remedy for some of our most troublesome and unmanageable diseases. The practical utility of this balsam in these cases, is by no means of recent date, but its adoption in practice has been strangely limited to a few sections of country, and to the practice of but few practitioners. Dr. La Roche has, in this essay, given us a history of its use, both interesting and substantially useful—setting forth, as it does, the very best authority of different ages, for its efficacy.

In the fifth number of the North American Medical and Surgical Journal, I laid before the profession the details of several cases exemplifying the beneficial effects derived from the balsam of copaiba in the treatment of chronic bronchitis. At a more recent period* I published the results of my experience with the same remedy in catarrh and morbid irritability of the bladder, as well as in leucorrhoeal discharges. The object of the present communication is to show, by facts which have come under my personal observation, and also by a reference to high medical authorities, that when employed under appropriate circumstances, and with suitable precautions, the copaiba has been found decidedly useful in some diseases of the intestinal lining membrane.

The first of these to which I shall call the attention of the reader is dysentery. The introduction of the copaiba in the treatment of this disease is not, so far at least as I have been able to ascertain, of very ancient date. Dr. Armstrong, it is true, states that it was recommended by some of the older writers in that "and similar diseases of the belly." But, conformably with his almost constant custom, he cites no names, so that his less learned reader is left in the dark relatively to the standing of those writers, and the period at which they flourished. Etmuller, and several of his contemporaries and immediate successors, speak of the use of balms in the secondary stages of the complaints in question. But as their remarks have reference to the Peruvian balsam, and never, it would appear, to the copaiba, and as neither James, Motherby, Lewis, Lieutaud, Cartheusen, nor other writers of their times to whom I have access, make any mention of it, it is not unreasonable to conclude that the practice of resorting to the copaiba was not, to say the least, as ancient or common as Dr. Armstrong would lead us to believe.

But, however it may be in regard to the antiquity of the introduction of the remedy in the treatment of dysentery, a question which, after all, is quite unimportant to most readers, we have evidence that, at a comparatively recent period, several British practitioners,—whether guided by their theoretical views of the mode of operation of the copaiba, or by the result of their experience of its effects in other diseases of a kindred nature, or following the example of their predecessors, it matters not,—were induced to resort to it in that complaint. What the effects of the practice were, or what was the estimate formed of its utility, may be ascertained by a reference to the works of Pemberton, Cheyne, Good, Armstrong, Abercrombie, and others. The first of these writers employed it in both the acute and chronic form of dysentery. He states, that when the griping pain, in the acute form, has in some degree subsided, he has frequently observed the greatest relief from the tenesmus, obtained by small doses of this remedy; and that injections of the same will often tend to remove the last mentioned symptom. "If it should happen," he continues, "that the practitioner is consulted after this disease has continued for some time, and has now put on the form of chronic diarrhœa, with the excretion of mucus and blood, attended with occasional griping pain and tenesmus; and if, moreover, the discharge should be unusually offensive and curdled, there will be reason to suspect that ulceration has taken place in the large intestines: here, too, the same dose of balsam of copaiba may be recommended, and injections of it as before mentioned."

Finally, when the disease arrived at this stage, and was attended with great debility, Dr. P. prescribed the same remedy in conjunction with the decoction and tincture of bark, and with tincture of opium when the tenesmus was distressing.

Dr. Cheyne, to whom the profession is indebted for a very excellent account of the dysentery which prevailed some years ago epidemically in Dublin, makes some valuable remarks on the use of bleeding and mercury in that formidable disease; and adds, that as soon as the influence of the latter was rendered apparent by the condition of the mouth, it was laid aside, and a mixture with balsam of copaiba was given every fourth or sixth hour. From this the greatest relief was often obtained: the faces, from being of a bottle green, and mixed with mucus (the effect of the calomel and opium,) and passed, with tenesmus, became more natural in appearance, and were voided less frequently; the patient considered himself cured, and in many cases his recovery followed. "It resulted from a consideration of the cases in my possession," Dr. Cheyne remarks, "that venesection, calomel and opium, followed by the copaiba mixture, with farinaceous diet, proved more successful than any other method which was adopted in the severest cases."

Dr. Armstrong states, that the copaiba might be beneficial in dysentery, but especially in those protracted cases which usually baffle the ordinary remedial means. He is of opinion, that it will hereafter be placed among the most useful secondary remedies, and generally employed after the lancet and calomel in the acute and subacute cases. In chronic dysentery he thinks it peculiarly suited, and states that in three obstinate cases, where purulent matter was passed from the intestines, it appeared to be of considerable service.

Dr. Abercrombie, than whom we know of no higher authority in relation to the treatment of diseases of the alimentary canal, states that in the more advanced stages of acute dysentery; when the morbid secretion continues after the inflammatory symptoms have been subdued, various remedies of a tonic and astringent nature appear to be useful. Among these he cites the copaiba. Dr. Abercrombie likewise recommends it, among other remedies, in chronic dysentery, and in the slighter and more obscure forms of affections of the intestinal mucus membrane. In all these cases it is also men-
tioned by Dr. Good as a valuable medicine. Mr. Hooper prescribed it in
the dysentery which prevailed among the troops that returned to England
after the discomfiture at Coruna; though particularly when the complaint
was attended with suppression of urine. Sir James MacGregor, in his
"Sketch of the Medical History of the British Armies in Spain," remarks,
that Mr. Woolrich found great benefit from a mixture of the balsam copaiba
in gum water with infusion of columbo, in the cases of dysentery treated
by him in the Hospitals of Celerico and Castello Branco. Dr. Bamfield,
after remarking that the copaiba has sometimes been used successfully in
chronic dysentery, adds:—"The friendly and kind Mr. Pearson, senior sur-
geon to the British factory in China, assured me he had cured the Hon.
Mr. E——ne with it, after every remedy prescribed in India and Europe,
for two years, had failed. It preserved a lax state of the bowels, and an in-
creased flow of urine." "It is a mild, safe medicine, and is entitled to its
turn, in the very obstinate chronic cases sometimes met with, among the
variety and changes of symptoms and of medicines prescribed." Finally,
Dr. O'Brien used the copaiba with much success in chronic dysentery, and
Dr. Joseph Brown recommends it combined with opiates in the same form of
the disease, as well as for the removal of the tenesmus in the acute form.

Favorable, however, as these testimonials of the effects of the copaiba
doubtless are, it would appear that, up to the present time, the practice of
resorting to it in dysentery has been almost exclusively limited to England.
On turning to the various publications that have appeared in France on the
subject of the treatment of that disease, or in which the therapeutic virtues
of the copaiba are noticed, we shall find that, with the exception of Barbier
and a few others, the physicians of that country either discard it com-
pletely as inapplicable and injurious, or at best speak of it as of a remedy of
doubtful efficacy in the very cases in which the English have found it useful.

Dr. Eberle, it is true, remarks, in his work on the Practice of Medicine, one
of the best of the class of which we can boast: that this remedy frequently
does excellent service, and that he has employed it with unequivocal benefit.

But judging from all I have seen, Dr. Eberle forms an honorable exception
in this matter; the copaiba being seldom, if ever, alluded to by American
writers in reference to its effects in dysentery. The difference of opinion
respecting the efficacy of the balsam—the high estimation in which it is
held by many eminent physicians in England, and the opposition or neglect
it has met with in France and this country—will be accounted for by those
who have had opportunities of noticing its effects in the above mentioned
disease, by the difference of experience with it in the two countries. In
England, practitioners, waiving all preconceived notions, if any such exist-
ed, have not hesitated to make a fair trial of the remedy; whereas, the
French and the practitioners of this country, entertaining more respect for
their theoretical views than for the testimonials of the practical experience
of foreigners, or a few of their countrymen;—not aware perhaps of its
having been used advantageously by others; or feeling a reluctance to sub-
stitute a new agent for those which they are accustomed to employ, have
discarded it untried from their practice. Such at least, is the only explana-
tion of this difference which occurs to me. I have little doubt that had the
remedy been as fairly tried in France and this country as it has been in En-
gland, we should find it more generally spoken of in the former country, and
among us as a valuable agent in the management of the painful disease in
question. It is impossible to deny that, on a superficial examination of the
subject, and laying aside for a moment the testimony above recorded in rela-
tion to the usefulness of the copaiba in dysentery, great objections may be
urged against the propriety of the practice; for the copaiba, it is well
known, is endowed with stimulating properties, and few physicians will, now
a days, venture to say that dysentery consists in any thing else than in an
inflammatory condition of the mucous membrane of some portion of the
Balsam of Copaiba.

alimentary canal, with or without concomitant affection of annexed or distant organs. But, when we consider that the primary impression of the remedy is made on the stomach, which is not the seat of the complaint—that by the time it reaches the inflamed surface it has probably already undergone considerable modifications—that these modifications must still more evidently occur if it is absorbed, and only penetrates to the diseased part through the medium of the circulation;—that if such be the route it takes, the inflamed surface is placed in nearly the same relation to the lining membrane of the stomach as other portions of the mucous tissue in those inflammatory complaints in which the balsam copaiba is known to be used advantageously. If, I repeat, we bear the circumstances in view, and recollect, at the same time, that remedies endowed with stimulating properties do not all act in disease merely in virtue of those properties, and that other articles of the same class are beneficially employed in inflammation of particular portions of the animal tissues, it will not be difficult to discover that something more is required to lead us to abstain from copaiba in dysentery than the simple fact of the former possessing stimulating properties, and the latter being of an inflammatory character. Nothing, indeed, but a positive demonstration of its injurious effects should induce us to reject its use in dysentery;—theoretical speculations should be of no avail, and experience should be appealed to confirm or infirm the position. But so far from this demonstration having been given—so far from experience having confirmed the validity of the opposition made to the remedy by some, or justified its neglect by others, the references above made to the writings of several eminent English practitioners, will show that the efficacy of the copaiba in dysentery is a fact placed beyond the possibility of doubt; while a consideration of its known effects in diseases of other portions of the mucous membranes, ought to have appeared sufficient, by itself, to lead physicians to think well, a priori, of the practice.

Influenced by these circumstances I was induced, some years ago, to resort to the copaiba in a case of dysentery which had proved intractable to the ordinary means. The effects obtained were such as to encourage me to make farther trials of the remedy; and, after duly reflecting on the issue of those cases, and on the phenomena presented, not only in obstinate, but in ordinary cases also, I have no hesitation in expressing the opinion that, so far as my own experience goes, the copaiba is entitled to the praise it has received, and consequently deserves a trial in some forms of the disease in question. It is hardly necessary to say, in the present state of our knowledge respecting the uncertainty of the action of medicinal agents generally, that the copaiba can not be expected to succeed in every case, and that it should not be prescribed in all stages of the complaint. Like other remedies, it will, in this disease, as in other forms of mucous inflammation, often fail, even when used under the most appropriate circumstances; so far as I can decide, it would be improper to have recourse to it at the commencement of the attack, before the violence of the inflammation has been reduced by general and local depletion, by diluent drinks, tepid baths, fomentations, mild purgatives, ipecacuahna, opiates, emollient injections, and blisters. Some physicians may perhaps allege, that these means being generally found sufficient by themselves to bring the disease to a favorable termination, there can be no necessity for administering, in addition, a remedy not universally successful and highly offensive to the taste. I am far from denying the sufficiency of the common remedies in ordinary cases of dysentery; like most practitioners I have myself, over and over again, seen them prove entirely successful. But the point at issue is not, whether these means will generally be sufficient, but whether it would be prudent or right to trust to them alone in all cases; and whether we should not do better, even in ordinary cases, with, than without the copaiba. As every one must be aware, dysentery sometimes proves intractable to the most favorite plans
of treatment and approved medicinal agents. Now, no one will deny that it is necessary to have recourse, under those circumstances, to additional means, if we can shorten the disease and afford effectual relief to the patient. If such be the case, there can certainly be no necessity to dwell on the propriety of making trial, when other remedies prove insufficient, of one recommended by high professional authorities, and which, from a consideration of its known effects in other mucous inflammations, we are naturally induced to conclude, may prove beneficial in the disease before us. While the question of the greater advantage resulting from its use even in ordinary instances,—in those that may generally be cured by the usual plans alone, resting on authorities which, to say the least, are as good as any that can be brought in opposition,—is not to be set at rest by the mere expression of doubt, or by an assurance of the sufficiency of such plans, but by a comparative survey of the results obtained with and without the remedy.

But even in cases in which depletion has been premised to reduce the force of the inflammation, some discrimination is necessary as regards the employment of the copaiba, because, although in general nothing contra-indicates its use so soon as the above object is attained, instances occur wherein the remedy would be likely to give, and has given, rise to effects of a different character from those anticipated, and which may forbid its continuance, or render additional means necessary. The generality of writers who have used this remedy in dysentery, are accustomed to speak in a rather vague manner of its usefulness in certain forms or stages of the latter; and though it is sometimes remarked that it disagrees with the patients, producing nausea, uneasiness, vomiting, and even aggravating the fever and the symptoms for which it is prescribed, nothing is said of the phenomena which may serve to indicate beforehand that it should be abstained from, or the condition of the organs on which such phenomena depend. And yet precise information on this subject is greatly desired, inasmuch as cases may occur in which, although the copaiba had given rise to those symptoms, it may nevertheless be persevered in, provided auxiliary means are used; while in others it would be proper to discontinue it at once. A few words on this subject may not be inappropriate in this place. In some cases the effects in question, nausea, vomiting, &c., depend on a simple nervous irritability of the stomach; itself the result of the existing disease, or of a peculiar idiosyncrasy in the patient. That such is the case cannot be doubted; for these effects sometimes occur under circumstances which forbid our referring them to any other cause. In cases of this kind, the gastric irritability, if it be a simple accompaniment of the disease, manifests itself whenever food, drinks, or medicines are introduced into the stomach, and, if severe, will contra-indicate the use of the copaiba, for, if excited by articles of a less offensive character, it is but fair to expect it will be greatly increased by the one in question. In some instances, however, where this irritability is great, and in many others where it is moderate, the copaiba, if used with laudanum or aromatics, or bitters, will be made to sit upon the stomach; and may be prescribed with impunity, and even with beneficial effects.

But though the symptoms mentioned depend often upon the cause assigned, cases occur in which they are evidently the consequence of a more serious condition of the gastric organs—inflammatory irritation. In dysentery, the latter is more frequently encountered than is generally supposed; and in cases in which the stomach itself is not so diseased, it is not rare to find the nausea, vomiting, fever, &c., produced or increased on the administration of the copaiba or other remedies of similar character, are kept up by vascular irritation of the upper portion of the small intestines. It cannot be necessary to enumerate here the signs which serve to distinguish this condition of the gastric organs from simple nervous irritability. Suffice
it to remark, that, in every instance in which they manifest themselves without a possibility of being referred to copaiba, the latter should be abstained from; whereas, when they follow the use of this medicine it should be discontinued, and recourse had to the means calculated to check, as speedily as possible, the morbid state on which they depend.

Judging from what I have had occasion to observe, I think I may safely say, that the balsam of copaiba is as serviceable in the secondary stages of acute dysentery as in the chronic form, and that it will be found particularly useful when the stools are rather copious, and contain a large proportion of mucus, or glairy matter mixed with blood. When the griping and tenesmus are still very severe, it will be necessary to combine the medicine with a suitable portion of opium; otherwise it may be used without, in an aromatic mixture,—in cold water, or in an emulsion. The opium may also be required if the copaiba disorders the stomach, and if this effect can justly be attributed to the simple irritability of that organ. In general it is advisable to give the copaiba in moderate and repeated, rather than in large doses, as it is thus less apt to produce griping pain, to purge, and to increase fever. But whether the quantity be large or otherwise, no time must be lost in suspending the remedy, and restoring to antiphlogistics, emollients, and narcotics, whenever symptoms of increased gastro-intestinal irritation and febrile excitement supervene.

The following cases, selected from several of which I have preserved notes, will confirm what has been said of the effects of the copaiba in dysentery.

Case I.—Mr. A——, aged about forty years, of a sanguine, bilious temperament, and generally enjoying good health, requested my attendance in March, 1830. I found him laboring under the usual and well known symptoms of acute dysentery—frequent stools, attended with severe griping pains, and violent tenesmus.—His skin was dry and hot, tongue pointed, red on the edge and tip, and furred in the centre: pulse quick and active. Besides these symptoms there was thirst and nausea. The matter voided was small in quantity, and consisted, for the most part, of slimy mucus, combined with a tolerably large portion of blood.—The urine was scant; but, owing to its being passed with stools, could not be inspected. Finally, pain was occasioned by pressure of the abdomen, and particularly of the epigastric region, as well as by the movements required to get in and out of bed, or to turn from one side to the other. These symptoms had come on suddenly during the preceding night; were preceded by slight chill, and were apparently the result of exposure to cold.

It is not deemed necessary to present here a detailed account of the variations in the symptoms which occurred daily during the course of the disease, or of all the remedial means resorted to in succession or simultaneously. Let it suffice to remark that viewing the disease in the light of an inflammation of the large, and of a portion of the small, intestines,—considering likewise that the lining membrane of the stomach was, to a certain extent, implicated,—depletion, both by venesection and leeches around the anus and at the epigastric region, was promptly and repeatedly used. To this were added tepid hip baths, emollient cataplasms over the abdomen, emollient and slightly anodyne injections, sweetened and acidulated gum, barley, and flax-seed water. Under this plan the irritation of the stomach was soon so far allayed as to allow of the exhibition of small and repeated doses of ipecacuanha and opium; Dover’s powder with calomel at night; and mild purgatives in the morning.

By these means the violence of the dysenteric inflammation was in a short time subdued,—the fever abated,—the tongue lost its redness and became moist,—the abdominal pain lessened, and the skin became softer. But although from these circumstances it was evident the patient had much improved, and yet the disease was far from being effectually checked; for the
gripping, and particularly the tenesmus, continued troublesome: the matter discharged presented pretty much the same appearance as before, and the pulse remained quicker and the skin warmer than natural.

Under these circumstances I determined to make trial of the balsam of copaiba, the efficacy of which, in diseases of other portions of the same tissue, I had had frequent occasions to observe, and the utility of which, in the present complaint had been, as I knew, recorded by Dr. Pemberton, Dr. Cheyne, and other writers of equal character. Twenty drops of this remedy, combined with eight of laudanum, were directed to be taken every four hours in two tablespoonfuls of mucilage. The fomentations on the abdomen, emollient injections, tepid baths, were continued, and light farinaceous nourishment was allowed. With this plan the patient had every reason to be pleased, for in a very little while the tenesmus began to give way, and finally disappeared entirely; the stools, though still somewhat frequent, lost their unhealthy appearance; the urine was passed in much larger quantity than before, and was evidently impregnated with the copaiba;—in short, the patient was relieved of all the most urgent symptoms under which he had labored. His appetite gradually returned, his digestive functions were restored, his strength increased, and in a few days he acknowledged himself to be as well as he had been for years past. A flannel roller was applied around the abdomen; and although the weather was unsettled, and the temperature rather low, he soon left the house, and resumed his ordinary occupations.

It may be proper here to remark, that this gentleman experienced an attack similar to the one just described some years before, and was treated on the depletory and evacuating plan. According to his own statement, the tenesmus and gripping continued much longer, and the convalescence was much more protracted on that occasion than on the present. In 1832, he once more came under treatment for the same complaint, brought on by exposure to cold and rain, and inattention to regimen. Yielding to his importunities I administered the copaiba earlier than had been done in the preceding attack. But we had soon occasion to regret this precipitancy, for the stomach being still in a state of irritation and the fever high, nausea, vomiting, pain and weight in the abdomen, and other unpleasant symptoms soon supervened, and compelled a discontinuance of the remedy. As soon, however, as the mischief thus occasioned, and the morbid state on which it depended had been properly corrected, the copaiba was once more resorted to, and proved as successful as it had done before.

Case II.—Casimir L., a colored man, aged about fifty years, and of a delicate and sickly habit, applied to me for advice in September, 1830. He labored under the ordinary symptoms of acute dysentery; and informed me that the disease had come on two days before, and had greatly increased since the evening previous to my visit, and soon after his taking a large dose of rhubarb. Without dwelling on the details pursued in this case, I shall merely state that, the evacuations being frequent, the tenesmus violent, the fever high, and the pulse tensive and accelerated, the patient was as copiously bled, both generally and locally, as his strength permitted. He was freely purged with castor oil, magnesia, and epsom salts; and immediately after put under the use of ipecacuanha and opium—to say nothing of internal and external emollients. On the third day, finding that the intestinal disease continued with but slight mitigation, that the tenesmus did not yield as rapidly as was desirable under the use of narcotics, and that the loss of blood was no longer admissible, blisters were applied to the inside of the thighs, and anodyne glysters pushed high up the rectum through the medium of a gum elastic tube. As soon as by these means the inflammation and fever had been sufficiently subdued, the copaiba mixture, with the addition of opium was prescribed, and was not long in producing the desired effect; for under its use the tenesmus, together with the rest of the symptoms sus-
merated, gradually, but completely, disappeared, and the patient was restored to his usual share of health. The convalescence in this case was more tedious than in the preceding, owing probably to the delicacy of the individual, who continued for some time subject, from the least exposure, to intestinal derangements. From these, however, he was invariably relieved by a dose of magnesia or castor oil, followed up by a few drops of copaiba and laudanum, and aided by abstinence from animal food.

**Case III.**—The subject of this case was a lady, thirty seven years of age, of a weak constitution and nervous temperament. She had labored, during some years previous to the present attack, under the dysmenorrhoea and other irregularities of the menstrual functions, for which the tincture of guaiacum, and other remedies of a kindred nature were prescribed. But as they invariably occasioned, even when given in small doses, irritation of the bowels, attended by dysenteric symptoms, they were at first temporarily suspended, and finally discontinued; leeches, opiates, tepid baths, and other palliatives being alone resorted to. These circumstances are mentioned to show the unusual degree of irritability of the intestinal surface in this case, and the caution it imposed as regards the administration of medicines of a stimulating or irritating character, as well as to account for the obstinate nature of the disease about to be described, and the disappointment experienced in obtaining from the remedies used their customary effects.

In the month of July, 1831, this lady was seized with symptoms of acute dysentery, accompanied with high febrile excitement. Antiphlogistics, emollients, and narcotics; bleeding, both general and local; tepid baths, cataplasms, and injections; together with mild purgatives, and ipecacuanha and opium, were resorted to. The former, however, were not carried as far as was desirable,—considering the frequency of the evacuations,—the severe nature of the griping and tenesmus, and the high arterial excitement,—in consequence of the prejudices of the patient, and of her great nervous irritability, which was aroused to an unusual degree, and appeared to be aggravated by every fresh loss of blood. For these reasons, and owing to purgatives seeming to do more harm than good, opium was more freely administered than is commonly done, both internally, (by the mouth, and in the form of injections,) and externally. Chief reliance, indeed, was placed in this medicine, aided by emollients.

Under this plan of treatment, progress towards recovery was, as may be supposed, much less rapid than it would have been had it been possible to use more active means. Nevertheless, though the tenesmus continued troublesome and the dejections frequent, slimy, and tinged with blood, amendment in other respects was obtained. The febrile excitement, the abdominal pain, and other inflammatory symptoms, being somewhat lessened, and the stomach apparently free from irritation, the opportune moment seemed arrived for resorting to means specially calculated to put a stop to the dysenteric symptoms. With this view the copaiba was administered in small doses combined with opium. But the expectations placed in its effects were not realized; for under its use the stomach became deranged, and the intestinal complaint aggravated. It was consequently laid aside, and sugar of lead and opium, as well as Hope's mixture of camphor water, nitric acid, and opium, substituted; but with no better effect—the dysenteric symptoms continuing with little or no abatement, and assuming the chronic form.

As it appeared from these circumstances, that no advantage, but rather positive injury, was to be expected from active remedies, or at any rate that the gastro-intestinal organs were not as yet placed in a proper condition to bear their impression, the treatment was once more limited to emollient injections, tepid hip baths, demulcent drinks, opiates, and light farinaceous diet; to which were now added occasional doses of blue pill. After pursuing this plan for some time, it was perceived that, though some amend-
ment in the more urgent symptoms was obtained, it was not sufficiently
great to encourage the hope that a speedy stop would be thereby put to the
disease; or, indeed, that the means employed could act otherwise than as
palliatives. Recourse was therefore had to other remedies; but with the
same want of success which had attended previous trials. At length the
copaiba was once more tried, and administered with laudanum in cold cin-
amon water. Finding that it no longer produced the baneful effects above
mentioned, and that the gastric derangement occasioned by it was slight
and transient, it was continued for some time,—the dose being increased
gradually from fifteen to twenty and twenty-five drops three times a day.
Under its use the disease gradually gave way, the patient was allowed more
substantial food, a flannel roller was applied around the abdomen, moderate
exercise was enjoined, and at the expiration of a few weeks she was com-
pletely restored to health.

It is scarcely possible, that in this and the preceding cases I should have
attributed to the copaiba a benefit referable to the powers of nature or to
the other means used, inasmuch as before it was prescribed, the change, in
neither instance, had been sufficiently great to lead to the expectation that
the disease would disappear without the further interposition of art.
Whereas the amendment obtained during its employment was much more
striking and lasting than that derived from the previous means; and during
the time it was used, no other remedy, likely to contribute in a powerful and
prompt manner to a favorite result, was exhibited. Abstinence from solid
food, and a restriction to small portions of light farinaceous diet, will, no
doubt, produce a very happy effect in dysentery and other abdominal dis-
eases, and there can be but few physicians who have not seen cases in which
this simple plan has been sufficient to effect a cure without the aid of any
remedial agent, properly speaking. But it is, at the same time, very cer-
tain that, except perhaps in very mild cases, it would be unsafe to rely ex-
clusively on this plan in acute dysentery, even after the inflammation has
been subdued. It is only suitable in the really chronic form of the disease,
and in all instances the effects alluded to, when obtained, are slow in being
evanesed. As regards opium, which, we have seen, was prescribed freely in
the above cases, and without the aid of which one has yet to learn how
dysentery can be treated, it is only necessary to remark that, however use-
ful it may prove as an auxiliary, we may doubt whether it can ever alone
cure the disease when the inflammation which remains, notwithstanding
the free employment of depletory means, is somewhat severe. If, while we
use it, the disease disappears, the effect must be attributed in great measure
to the powers of nature, which, as we know, are sometimes alone adequate
to the task, or to the other remedies simultaneously employed. At any rate,
in admitting that the powers of nature and opium are alone sufficient to
relieve the patient completely of the disease under which he labors, or that
the latter remedy can prove the efficient agent, it is presumable that the cure
will not be effected promptly; and that time will be required before the dis-
ease gives way entirely. Now, in the above cases, although the irritation
was not violent, relief was soon procured, and the cure was completed in a
short time after the copaiba could be readily tolerated by the stomach and
small intestines. It may be remarked, in conclusion, that the cases above
described serve to confirm the opinion expressed in reference to the neces-
sity of the stomach being free from irritation, and of the febrile excitement
being moderated before the copaiba can be used advantageously. A neglect
of these circumstances during the second attack under which the subject of
the first case labored, led to injurious consequences; while, on the contrary,
as soon as the gastric irritation was subdued, the copaiba was used success-
fully. In the second case, the subject of which was throughout remarkably
free from stomach affection, the copaiba was advantageously employed as
soon as the inflammation had been subdued. In the third, again, the gastric
and intestinal organs being inordinately sensitive, it was some time ere the remedy could be employed; yet, as soon as this morbid state was relieved, the desired effect was obtained. It may be thought that I have not attributed sufficient influence to ipecacuanha or to purgatives, and that had I used them more freely, the copaiba might have been dispensed with entirely, or, at least, that the patients might have been more quickly relieved.

On this subject I must be allowed to entertain a different sentiment, and frankly to admit that I have not yet been made sensible of the advantages resulting from active and repeated purging in dysentery. That the bowels should be freely emptied of their contents at an early period of the attack—depletion, general and local, being premised if the inflammation runs high,—is a fact I am not disposed to dispute. Nor does it appear less proper, that they should be kept open throughout the course of the disease, with a view of allaying the griping and the tenesmus. But in order to meet these indications there can be no necessity for repeated and active purging, as the first can be met by a mercurial cathartic or two, followed by a few doses of some mild aperient; while the frequent use of emollient injections will in general suffice to keep up a soluble state of the bowels. Indeed, while this plan is equally efficient in clearing the intestines of all irritating matters, it is superior to the other in occasioning less distress to the patient, and in being less likely to aggravate the disease or retard recovery. In order to produce the evacuant effects expected from them, purgatives must pass along the whole tract of the alimentary canal—over the diseased as well as the healthy portions—and there occasions an impression of greater or less force according to the degree of their activity; or they are absorbed into the circulation, and operate on particular portions of the tube for which they have an affinity. In either case the effect must be of a stimulating character, for the secretory process is greatly promoted, and the peristaltic action of the intestines excited. If such be the case, it can scarcely fail to follow, that active purgatives will often, particularly if frequently repeated, occasion more distress and annoyance to the patient, as well as more irritation of the inflamed surface, than is safe, or is compensated for by the evacuation of fluid. They may thereby tend to aggravate, or at least to keep up the disease, and should therefore give way to the employment of the other means above mentioned, which either act mildly, or, as in the case of injections, operate on the diseased parts, and, while emptying them of their irritating contents, tend to assuage pain and hasten recovery.

In respect to ipecacuanha, though I think highly of its effects, either when used alone or in combination with calomel or opium or both—particularly in acute dysentery, I am not prepared to rely exclusively upon it in all stages of that disease, or in the chronic form; and whenever the violence of the disease is moderated, I have for many years been in the habit of substituting other means, under the impression that they proved more successful. These opinions will doubtless excite the censure of many of the readers of this Journal: for I am aware that a large portion of the members of the profession in this country have formed a different estimate of the virtues of purgatives and of ipecacuanha in dysentery. But so fully persuaded am I that the plan of treatment advocated in these pages, and which could be shown to have the sanction of high professional authorities, is, to say the least, as successful as the other, and indubitably less distressing to the patient, that I have little doubt, much of the opposition it may encounter will cease the moment it is put to the test of actual experience.

Diarrhoea.—The next subject to which I shall call the attention of the reader, is the effects of the copaiba in the treatment of diarrhoea.

When and by whom the practice of resorting to this remedy originated I shall not attempt here to determine. It will be sufficient for my present purpose to show, by a brief reference to a few writers within my reach, that for more than a century it has been countenanced by practitioners of deserved reputation, and by some of them warmly recommended.
In his work on copaiba, which was published as early as the year 1710, Hoppe speaks of its use in diarrhœa, in a way to indicate that the practice was common at the time he wrote. Nor was it neglected at a later period. It has been already stated, that Dr. Pemberton recommends it in those cases of dysentery in which the disease, having continued for some time, has assumed the form of chronic diarrhœa and is attended with exudation of mucus and blood, occasional griping pain and tenesmus. The same writer also used it, both by the mouth and in the form of injection, in cases in which he was led, by the offensive smell and curdled appearance of the discharges, to suspect that there existed ulcerations in the large intestines. Hallé in his notes on Tissot, and also Nysten, speak in favorable terms of the copaiba in atonic diarrhœa. Richard regards it as an advantageous agent in the chronic form of the disease when the mucous membrane is the seat of slight inflammation; and Barbier of Amiens also speaks favorably of its effects in some varieties of the same disease. Dr. Good recommends it, in a particular manner, in that form of diarrhœa in which the discharges consist more or less of membrane-like tubes, whitish, viscous and inodorous. He remarks, that the copaiba has proved still more serviceable in such cases than the milder preparations of mercury, which he thinks are very useful. "When in this disease I have not been able to induce the patient to take it by the mouth, I have recommended it in the form of injections. In one case, in which I prescribed it in this form, three drachms intermixed with three ounces of mucilage of linseed being thrown up three times a day, it proved eminently useful." Dr. Copeland also advocates its use in the chronic form of simple mucous diarrhœa, and in cases complicated with, or depending on, the ulceration of the intestines.

Among the physicians of our own country we find, so far as my memory extends, but a few by whom the copaiba is spoken of as an useful agent in the disease in question. Indeed, I believe, that of the writers of note, Dr. Eberle, again, forms an exception on the subject. In his work already quoted (ii. 305,) he remarks that in obstinate cases the internal use of that remedy will sometimes do much. Differing, however, from some of the writers already mentioned, he does not think it probable that it can procure any permanent relief in cases attended with ulceration of the intestinal mucous tissue. Yet, in cases of this kind, he has known considerable temporary benefit derived from this article. In a case of chronic diarrhœa, of upwards of six month's continuance, and depending, as Dr. E. thinks, on simple chronic inflammation without ulceration of the mucous tissue, he succeeded in effecting a perfect cure by means of copaiba, given to the extent of from thirty to forty drops three times daily, and fifteen drops of laudanum with each dose.

Such being the views entertained by high professional authorities abroad, relative to the remedial agency of copaiba in diarrhœa, and such the neglect it has met with at home, I shall offer no apology for devoting a few pages to the consideration of the subject, by laying before the reader the details of several cases, and a few remarks suggested by the phenomena presented.

Case I.—A case answering to the description given by Dr. Good, of the tubulated form of diarrhœa, and bearing some resemblance to those, of which an account was published by Dr. Powell in the sixth volume of the Transactions of the London College of Physicians, came under my immediate notice a few years ago. The patient, a female, aged about forty years, had been subject, occasionally, for sometime back to a slight derangement of the bowels. The attack in question had come on suddenly, and had rapidly assumed a serious character. When I first saw the patient she had not left the house for several weeks; during which time she had taken a great variety of family medicines. She complained of pain along the arch of the colon, and about the umbilicus. The pain was occasionally very severe and griping, but was not excited or increased by pressure. The stomach was
Balsam of Copaiba.

[April,

irritable; there was some fever, and the tongue was pasty. The alvine evacuations were not very frequent, but consisted, in great measure, of thin unhealthy feculent matter, mixed up with a large portion of a substance which was at first supposed by the friends, and attendants to be worms, and subsequently by some persons the internal lining of the intestines; but which evidently consisted of flakes of coagulable lymph. Lecches were applied around the anus and over the epigastic region—the diet was restricted to small quantities of farinaceous articles; and tepid baths, opiates, alternative doses of blue mass, with rhubarb and ipecacuanha, were successively prescribed. But, although by these means, the pain and irritation were allayed, yet little impression was made on the diarrhetic symptoms—the discharges continuing as frequent as before, and containing the same albuminous flakes. It was in consequence thought advisable, with a view if possible of expediting the cure, to resort to additional means; and selection was made, at my suggestion, of the copaiba. It was administered both by the mouth and in the form of injections, as recommended by Dr. Good. Under the use of this medicine the disease gradually gave way, and in a few weeks the patient was restored to health.

I am disposed to attribute the largest share, if not the whole, of the benefit obtained in this case to the copaiba, because during the time it was used, no other article likely to exercise an agency in the cure was resorted to, and before it was prescribed the amendment obtained was not such as to justify a belief that the disease, if left to itself, would terminate favorably in so short a time.

When on this subject it may be proper to remark, that Dr. Powell is of opinion, there was no evidence, in the cases of which he has given an account, of an inflammatory process going on, as the pain was rather of a spasmodic nature, and the skin and pulse were natural. With due deference, however, to the pathological knowledge of Dr. Powell, others may be allowed to suspect that in the present instance he has not adopted a correct view of the subject. To this opinion we are led by the circumstance, that when exudations of coagulable lymph occur in other portions of the mucous tissue, they are found to be the product of inflammation. They occur in dysentery, in croup, &c., which are undoubtedly inflammatory diseases; and experience has fully shown that inflammation, even of vital organs, is not necessarily accompanied with fever and hot skin. But, however, it may be in regard to the cases which fell under the notice of Dr. Powell, there can scarcely be any doubt that in the instance just described the complaint depended on inflammation. The state of the skin, the febrile excitement, the abdominal pain, the furred and pasty tongue, and the effect of the treatment—to say nothing of the character of the matter discharged—indicate that such was the nature of the disease. Nor can this view be invalidated by our knowledge of the stimulating property of the copaiba: the facts already detailed in this communication, as well as others to which I shall advert presently—to say nothing of its use in gonorrhoea and other diseases—demonstrate that the same remedy is used with unequivocal success in cases depending on inflammation. Dr. Powell relies principally on purgatives—senna tea, combined with infusion of gention and liquor of potasse. From such remedies, however, it is not probable we can obtain any other effect than the evacuation of the coagulable matter;—supposing, indeed, that purgatives will not be sometimes apt to aggravate the disease. By those who entertain views different from those of Dr. P. relative to the pathology of the disease, and who are sensible of the mode of operation of purgatives, it will be readily admitted that it would be more rational to resort to such means as are calculated to remove the cause of the exudation, by changing the action of the secreting vessels, than to trust to those that act principally as evacuants of the bowels.

Case II.—Mucous Diarrhoea.—A gentleman applied to me a few years
ago for advice. He had recently returned from India, and had labored, during nearly the whole passage, under bowel derangement. At first the disease was attended with pain, and, as far as I could ascertain, with considerable fever. But whatever might have been the case at first, these symptoms had in great measure subsided at the time the patient came under my observation; for the skin, though dry and harsh to the feel, was rarely preternaturally hot, the pulse was but moderately excited, and the pain was seldom if ever troublesome. The stools were very frequent, and consisted of a mucous-like substance, with very little bile, and a small portion of febrile matter, and occasionally contained a fluid having the appearance of pus tinged with blood. The patient was emaciated, andlabored under depressed spirits—the abdomen was tense and hot, the stomach was not much implicated, and the urine was passed in small quantity, and of a red color. The disease had come on after exposure to wet and cold, and was probably aggravated and kept up by improper treatment and diet.

Believing from a review of the symptoms enumerated that the disease depended on chronic inflammation of the lining membrane of the intestines, and fearing the existence of ulceration, I had recourse to antiphlogistic means, leeches around the anus, and cups over the abdomen; followed by especacuanha and opium, alternative doses of blue mass, tepid baths, diluent drinks, and emollient injections. Under this plan, the evacuations gradually lessened in frequency, and the skin lost, in a great measure, its harshness and dryness. But though some amendment was thus obtained, the disease was not arrested; the evacuations continuing to present the same unhealthy appearance both as regards the color and the consistence of the matter voided. Under these circumstances, and expecting little further benefit from the remedies already used, it was thought advisable to make trial of others of a different character. With this view the balsam of copaiba was prescribed in doses of twenty-five drops three times a day, with from five to ten of laudanum in each dose according to circumstances, in a wine glassful of cold camomile tea. Finding that the remedy did not disagree with the stomach, and that the effects on the bowels appeared from the first, beneficial, it was persevered in—the dose being gradually increased, and light nourishment at the same time enjoined. At the end of about a month the patient was restored to health.

Whether in this case the diseased membrane was the seat of ulceration is a point upon which I am not prepared to express a decided opinion; although the appearance of the dejections, as also the long duration of the disease, may probably be thought to justify an opinion that such was the case. This leads me to remark, that I am not disposed to join Dr. Eberle in the opinion that the copaiba though capable of relieving, cannot cure diarrhœa attendant upon ulceration of the bowels. It is well known that these ulcerations are curable, and cases in which they are thought to occur are cured, by the same means which succeed in those in which they do not exist; hence it is very difficult, if not impossible, to decide positively during the continuance of the disease, whether or not they are present. When we bear these circumstances in view, and remember besides, that it is admitted the copaiba may afford relief in such cases, it is difficult to discover what are the grounds for believing that in none of the cases that had got well under the use of that remedy the membrane was the seat of ulceration. Nor is this all. Dr. Eberle admits that the copaiba is excellent in chronic enteritis, and in describing the post mortem appearances in that disease, he states that ulceration is the ordinary condition of the mucous tissue of the intestines. By this he seems to involve himself in contradiction, for it is not probable that ulcers exist only in cases that terminate fatally. As they are not necessarily fatal they may be presumed to have existed also in individuals who recovered; and if the copaiba had contributed to their cure, there can be no reason to deny that it is adequate to the same task in chronic diarrhea.
which dissection shows is generally accompanied by ulceration, and between which and chronic enteritis there appears to be a distinction without a difference.

But be this as it may, it is not my wish to ascribe to the copaiba the whole credit of the cure in the case last described. The remedies previously employed, aided by proper regimen, had evidently produced much good; they might perhaps have sufficed, in time, to effect the desired object, and had in all probability placed the patient in a situation to get well more readily than he would otherwise have done. But from what we know of the effects of the copaiba in mucous inflammations generally, and particularly the disease before us—from the known protracted nature of such cases when treated by other means or when left to the powers of nature, we may reasonably presume that it was instrumental in shortening the duration of the disease or even effecting the cure.

Case III.—A young female, about twenty-two years of age, applied to me for advice, in November 1834, for the cure of diarrhoea. The disease was of four months standing. The patient was somewhat emaciated—her complexion was sallow, skin dry and husky, pulse weak and frequent. Her appetite was capricious, and thirst troublesome. The abdomen was a little tender to the touch, and the evacuations were very frequent, particularly towards morning and evening, and were attended with severe griping pain, and often with tenesmus. The matter discharged consisted of a small quantity of thin, unhealthy feculent matter, mixed with pieces of undigested food, and a large portion of mucus; the whole generally tinged with blood.

The patient had been, on different occasions, under regular medical treatment, and had besides made use of a number of family and popular medicines; but without more than temporary relief.

Cups were ordered to be applied along the arch of the colon, and over the right iliac region, and blue pill, followed by rhubarb and magnesia, prescribed. To these succeeded small doses of ipecacuanha and opium, lime water and milk; while boiled milk and water crackers were allowed for nourishment. From the local depletion some advantage was obtained; the tenderness and tenseness of the abdomen being a little mitigated. But so far from any benefit being produced by the other remedies, the disease in a few days appeared rather aggravated than otherwise—the stools being more frequent, and attended with more griping, and considerable nausea. The ipecacuanha was discontinued; and, as soon as the gastric distress had subsided, recourse was had to the copaiba, which was administered three times a day in doses of fifteen drops, with five of laudanum, in a glassful of camomile tea; the patient being at the same time allowed at her own repeated solicitation, water crackers, and boiled flour mixed with milk and water for nourishment, and cold toast and water for drink. The evacuations being still attended with pain, and the abdomen tender and tense, the local depletion was directed to be repeated; but this being objected to by the patient, a flannel roller and emollient injections were substituted.

From this plan a sensible amendment was obtained before the end of a week. The stools were reduced from ten or twelve, to four or five in the twenty-four hours, and the griping, though still troublesome, was lessened in degree. The copaiba was increased to twenty-five drops three times a day; and at the end of another week the patient reported that the evacuations were reduced to two or three in the twenty-four hours, and were attended with less pain; that the matter discharged was of a firmer consistence and healthier appearance; and that her appetite was good and her thirst less troublesome. The remedies were directed to be continued; but in diminished doses.

The disease continued with but little further abatement until about the 1st of December, when the intestinal derangement appeared to yield; the appetite became better, the stools were reduced to two, at most, in the
twenty-four hours; the matter evacuated assumed a very natural appearance. The copaiba and laudanum were still farther reduced in quantity, and more nourishing food prescribed. On the seventh of the month, in consequence of exposure to cold and humidity, the disease was of a sudden considerably aggravated, and was attended with pain and fever; but after a few days it gave way to proper remedies. The copaiba was resumed; animal jelly was allowed; and this was followed, on the twenty-second, by solid food. The medicine was in a day or two discontinued, and on the 2d January, the patient reported that she was now perfectly well.

The agent in the cure of this case is, I think, easily recognized. The quantity of laudanum added to each dose was very small, too much so to exert a decisive effect on the disease, and only sufficient to place the stomach in a condition to support the other medicine. Besides, previous to the time the copaiba was prescribed, opium was administered, in substance and in various of its preparations, by those who preceded me in the management of the case; and the patient had, of her own accord, taken, for several days, repeated doses of laudanum, and never with more than temporary relief. It is not probable, that if of no service as a curative means,—if only beneficial as a palliative, when thus prescribed freely, it can have had the principal agency in the removal of the disease when administered in minute doses conjointly with another medicine. As regards the articles of nourishment that were allowed, it may fairly be doubted whether they could be sufficient to effect a cure in a case of this kind. In mild attacks of diarrhoea, unattended with signs of severe irritation, there is little doubt that a proper regimen will often be sufficient to enable us to attain the object. But when the disease assumes a severe character,—when it proves obstinate, it is in general found that other and more active means are required. Considering, indeed, the presence of griping, of tenderness of the abdomen, and other symptoms of the kind, it is probable that more physicians will be disposed to censure the use of such articles as were allowed in the case before us, than to approve of them; and that, therefore, few will refuse to coincide with me in denying to them the principal agency in the cure.

From this it follows, that if the favorable termination of the case cannot be ascribed to the opiates, or to the articles of nourishment employed, we must necessarily refer it to the remedial agency of the copaiba; particularly as its beneficial effects in other instances of a similar or kindred kind have been well ascertained. While the local depletion produced relief but of one symptom only; the purgatives and other remedies employed, if they did not aggravate, at any rate did not arrest the disease; and the flannel roller and emollient injections, though excellent adjutants or palliatives, are not by themselves adequate to the task of eradicating the cause upon which such diseases depend.

In conclusion, it may be proper to remark, that other remedies, often employed successfully in the treatment of severe and protracted diarrhoea, were not resorted to, partly because the patient objected to them, but principally because it was desired to make a fair trial of the copaiba, the efficacy of which was already well known. Whether this plan was judicious or justifiable; and whether a cure might have been more speedily obtained by other means, can only be decided by those who have made trial of the remedy in questions, and compared the results with those obtained from other modes of treatment.

Case IV.—In a case of septic diarrhoea which came under my notice in the Autumn of 1833, the balsam of copaiba, though it did not effect a cure, was sufficiently serviceable to justify an account of its effects. The patient, Mr. J. B., about sixty five years of age, had been for a long while subject to attacks of hemorrhages from the bowels. These came on at irregular periods, and generally continued with longer or shorter remissions
during a day or two. They were considered in the light of a salutary effort of nature to unload the vessels of a superabundant quantity of blood; particularly those of the brain, which had a tendency to fulness, and they were unconnected with intestinal disease. In August 1833, this gentleman was attacked with hemiplegia, and palsy of the tongue; both of which, however, together with the cerebral inflammation which supervened, were removed by active antiphlogistic and revulsive means, and mercurial ptyalism. A short time after this Mr. B. was seized with febrile symptoms attended with considerable determination of blood to the head, which gave way in a few days to depletion and mild purgatives. From this period, however, he remained subject to frequent attacks of bowel complaint, preceded by confusion in the head, and occasionally severe vertigo. The diarrhea generally continued three or four or even more days, and had the effect of relieving the cerebral derangement. In this respect it may have been salutary; but as the discharges, which consisted of thin feculent matter, mixed occasionally with a large portion of blood, were at times frequent and copious, they finally produced considerable emaciation and debility. In consequence of this it became necessary to restrain these attacks within safe limits, without, however, putting a stop to their return, and thereby losing the advantage of the derivative action they occasioned. For this purpose the balsam of copaiba was prescribed, after an ineffectual trial of other means, and was used alone during the intervals of the attacks, and in combination with laudanum when the discharges were carried too far. From this plan, aided by restrictive and appropriate diet, the desired effect was obtained. The bowels were kept in a soluble state; and though Mr. B. continued subject to attacks of diarrhea, these gradually lost much of their former severity, and came on at longer intervals; while, the cerebral derangement was lessened in force, and the patient improved in flesh and strength.*

As the relief in this case (in which, for the reasons assigned, a complete cure was not attempted) followed immediately after the copaiba was resorted to, and as other means had failed, it cannot be improper to ascribe it to that remedy. But whatever may be the opinion of others on this subject, there cannot be any doubt as to the efficacy of the copaiba in the following case.

**CASE V.**—Miss Isabel D—, aged thirteen years, was attacked, while travelling during the summer of 1833, with looseness of the bowels. The discharges were at times frequent and copious, and attended with some griping pain. But, as the friends of Miss D. were of opinion that the disease arose from, and was kept up by change of water and inattention to regimen, and that it would give way as soon as the subsidence of the cholera, (which then prevailed in this city,) would allow them to return home, nothing of importance was done to check it. In this expectation, however, they were disappointed; for although the patient was placed under medical treatment soon after her arrival, the disease continued with short intervals of respite until the commencement of the following year. Various remedial means—local depletion, revulsives, opiates, alteratives, astringents, chalybeates, tonics, aided by proper regimen, were successively resorted to; but to little purpose. The disease was, it is true, occasionally mitigated for two or three days, or even for a week or more at a time; but it invariably

* Mr. B. adhered with good effect to this plan for some months. Gradually, however, he relaxed in his attention to his health. He indulged in the luxuries of the table; ate copiously, and finally abandoned the use of the copaiba. He refused to resort to the active means required to relieve his attacks of cerebral irritation; which increased in frequency and violence, and produced considerable emaciation. His bowel complaint became very troublesome, and he died in March 1835.
returned with renewed violence—sometimes from imprudence in diet, at others, without any assignable cause. The longest interval of relief was of five weeks continuance; and was apparently obtained through the agency of colombo powder. But as, during the whole of that period the patient was strictly kept on small quantities of cold roasted fowl and stale bread—a regimen which experience had shown to agree with her better than any other; and as her other symptoms were little amended, and as she relapsed whenever a change of diet was allowed, or the medicine was omitted, it may be doubted whether any substantial amendment was obtained of the morbid state of the intestinal tissue, upon which the diarrhoea depended. But, however this may be, after the recurrence of the disease, the remedy above mentioned no longer produced any beneficial effect.

The number of stools was seldom less than six or seven daily; and they consisted generally of dark, thin, offensive, and frothy feculent matter, mixed often with portions of undigested food. In the progress of the disease, the skin became dry and harsh to the feel, and of a waxy appearance; emaciation and debility gradually supervened, attended with thirst, and a feeble and accelerated pulse. The appetite continued notwithstanding nearly as before the attack; and although the patient was usually disturbed once, and sometimes twice in the night unless she took opiates the evening before, her sleep was quiet and refreshing.

Such was the condition of Miss D. when my attention was more particularly called to her case. Finding that none of the remedies heretofore employed had produced permanent relief, and recollecting the salutary effects obtained from the balsam of copaiba in similar complaints, it was prescribed in doses of twenty drops, with three of laudanum, three times a day. The benefit derived from it exceeding my warmest expectation;—the discharges soon diminishing in frequency and improving in appearance. The medicine was increased in quantity, and the laudanum gradually omitted. The patient, who had been kept on the diet already mentioned, was allowed to resume gradually her ordinary food, and experienced no ill effects from the change. She gained strength and flesh; her skin resumed its natural appearance, and in the course of some weeks she was enabled to discontinue the use of the medicine.

When we bear in mind the long standing and obstinacy of the disease in the foregoing case;—the failure of all the remedies employed; the relief obtained soon after recourse was had to the copaiba, and the permanency of that relief;—when, besides, we compare this result with that obtained from the same remedy in the cases already described in the present communication, and in affections of other portions of the mucous membrane, it appears evident that the credit of the cure is ascribable to that agent and to no other. The conclusion is the more natural, as no other remedy likely to produce the effect was employed in conjunction with the copaiba, except laudanum. But as this had failed before being used with the former, though administered in large doses; and as it was laid aside before a cure was obtained, it is impossible to lay much stress on its operation. As regards the regimen, it will be sufficient to remark, that it was similar to that which had been allowed from the time Miss D. was first placed under treatment; and that as it did not succeed in curing the disease before recourse was had to the copaiba, it is not probable it was more effectual at a subsequent period of the attack.

Case VI.—Chronic Enteritis.—In speaking in another place* of the efficacy of the balsam of copaiba in disease of the urinary organs, I stated that that remedy could be employed usefully, not only in cases characterised by an increased mucous, or by supplicative secretion; but also in certain varieties of irritation of the lining membrane of the bladder, unattended by

* American Journal of the Medical Sciences.
either of these changes. The following case will serve to show, that in
complaints of the alimentary canal dependent upon chronic inflammation,
but unconnected with symptoms of dysentery, or of diarrhoea properly
speaking, the copaiba will be found, at least sometimes, highly useful.

Miss M., aged about twenty-five years, of a bilious and nervous tempera-
tment, had been subject for a long period, to attacks of gastro-intestinal irri-
tation. Late in the autumn of 1835, she exposed herself during her cata-
menial period, to a current of air, immediately after coming out of a warm
bath. The consequences of this imprudent act were soon manifest: she
was attacked with chill, followed by hot fever and acute pain in the left iliac
region; and the menstrual discharge was suppressed. The pain was aggra-
vated by pressure and the least change of position, and was accompanied by
a sensation of weight in the uterine region, frequent desire to urinate, con-
stipation of the bowels, thirst, &c.

Presuming, from this assemblage of phenomena, that the patient labored
under peritoneal inflammation; and that the left ovary and the neck of the
bladder were probably implicated in the morbid state, recourse was had to
adept deploration, general and local, emollient applications, diluent drinks,
enemata, mild purgatives, and finally to a blister over the parts affected.
By these means Miss M. was so effectually relieved, that in the course of a
few days she was allowed light nourishment; and soon after was enabled
to leave her bed. She did not remain long, however, in this favorable situ-
ation; for in a few days she experienced, in consequence of inattention to
diet, a return of the disease. This attack was more alarming than the
preceding one, inasmuch as, independently of the morbid state already
described, she now suffered from an inflammation of the lining membrane
of the digestive tube and of the vagina; and, owing to her present debility,
it was found impracticable to carry energetic measures to the extent usually
required in complaints of this kind.

By means of local depletion, however, proportioned to the strength of the
patient and the state of the pulse, as well as of emollient applications, and
external revulsives, the most urgent symptoms soon gave way. But the
irritation of the intestinal mucous membrane assumed a chronic character,
and continued after that of the serous tissue had entirely subsided. The
patient now complained of pain between the umbilical and epigastric re-
gions, particularly a few hours after taking food. The tongue was red at
the edges, and there was thirst; the appetite though not lost was feeble
and irregular. The stomachic digestion was not much impaired; but the
intestines performed their functions in a very imperfect manner, being usu-
ally costive, at times preternaturally relaxed, and the passage of food through
them being attended with pain and considerable flatulence. The skin was
pallid, and of a slightly yellow tinge, and became warm and dry towards
evening. At other times its temperature was a little above the natural
standard, with the exception of the feet and hands which were cold. The
pulse was accelerated and small, and there was slight oedema of the face
and ankles. The muscular strength was much reduced, and the menses
suppressed.

To combat this morbid state of the intestines, moderate antiphlogistics,
emollients, alteratives, and a mild regimen were employed, and persevered
in for some time; but they failed in making a strong impression on the dis-
ease. At this period a medical friend of the family was consulted, who
came to the conclusion that the combination of phenomena presented was
ascribable to the suppression of the menses; and that this suppression was
probably occasioned by a rheumatic affection of the uterus. In conformity
with this opinion, and regardless of the condition of the lining membrane
of the alimentary tube, which he regarded as of secondary moment, and
likely to subside as soon as the uterine disease had been eradicated, the
vol. tinct. guaiacum was recommended, in teaspoonful doses three times
daily. This remedy was selected on account of its emenagogue and anti-
rheumatic virtues, as well as from its having, as was stated, succeeded in
the hands of the adviser in several cases of the same kind. Opposition was
made both to these pathological views and to the use of the guaiacum; from
a fear, that it would aggravate the intestinal irritation, which whether pri-
mary or secondary demanded serious attention. However, seeing that the
remedies heretofore employed had failed, consent was reluctantly given to
the adoption of a mode of practice, which, irrational as it might appear to
him and to some of his friends, was enforced with a promise of success by
one in whose experience and skill great confidence was reposed. But the
hopes thus raised were not destined to be realized, and the guaiacum, so far
from displaying advantageously its anti-rheumatic and emenagogue virtues,
produced an aggravation of all the prior symptoms, and, in addition, brought
on an inflammatory irritation of the rectum, attended with pain and dysen-
teric discharges.

The medicine was in consequence discontinued, and was replaced by an-
tiphlogistics and emollients, by means of which the patient in a few days,
gained the state in which she had been before the recent aggravation of her
malady. But though the effects of the guaiacum were thus oblviated, no
advantage was gained over the original disease, which continued its course
with little or no change for some time, when Miss M. was placed under the
use of the balsam of copaiba. This remedy was recommended on the
ground, that it had been found useful in irritation of the bladder, unattended
by a secretion of mucus or puriform matter; that in the case under treat-
ment the inflammation was in all probability situated in the lower portion
of the small intestines, and not in the stomach or jejunum.—In its passage
down, the remedy would probably be absorbed before reaching the diseased
spot—in which case the latter would be placed in the same relation as re-
gards the copaiba, as other and more distant portions of the mucous mem-
branes in the diseases of which it is found useful. Experience had proved
it to be often of great service in dysentery and diarrhœa; and if so, there
was reason to think that—even supposing it not to be absorbed before
reaching the diseased surface—it might be equally efficacious in the present
complaint; in as much as it was highly probable it did not act in the former
cases in virtue of its astringent properties, but by altering the morbid action
upon which the discharges depended.

The copaiba was directed to be taken in cold water, in doses of twenty-
five drops twice a day, and to our great satisfaction was found, in the course
of eight or ten days, to have produced a marked amendment in the disease.
Encouraged by these results, and finding that though the medicine was
swallowed with repugnance it did not disagree with the stomach, it was
ordered to be repeated three times a day, with the addition of a few drops
of laudanum, to guard against its acting upon the bowels. This course
was pursued during three weeks; at the termination of which period, the
disease having nearly subsided, and the digestive functions being almost
restored to their normal condition, the patient was allowed to discontinue
the copaiba, and to partake of better fare. A short time after this she was
sent to the country, whence she returned much improved in appearance and
strength; her catamenia re-appeared, and she was at length restored to the
enjoyment of health.

At the date of the occurrence of the above case, I was not aware that
the copaiba had been employed successfully in the peculiar form of chronic
enteritis, under which Miss M. labored. Since then, however, and indeed
since drawing up the preceding account, I have found that the practice, like
every other thing under the sun, is not new. In his Practice of Medicine,
Dr. Eberle enumerates the remedy among the most useful in such affections.
But of Dr. E.'s experience with the copaiba in the management of chronic
enteritis I could know nothing in 1525; as he is silent on the subject in his
Materia Medica, published a year or two before, and his other work, above alluded to, only made its appearance in 1830, or 1831. At what period Dr. E. discovered the efficacy of the balsam in such cases does not appear. But, however this may be, the testimony of this distinguished writer is of great value, as it will doubtless serve to settle the question respecting the propriety of the practice.

The balsam of copaiba has been used as a verminificine medicine; and is regarded by Dr. Ribes and others as highly efficacious for the destruction and expulsion of the different varieties of intestinal worms. It forms a component part of several preparations employed in cases of tenia and lumbrici. Merat and Delens (Dic. de Mat. Méd. vol. ii.) state that the copaiba has been efficaciously used by a medical practitioner of Lyons in a case of tenia. But the fullest and most satisfactory account we have on the subject, is recorded by Chauffard of Avignon, in one of the volumes of the Transactions Médicales of Paris (13 p. 29 July, 1833.) A soldier of the garrison was admitted into the hospital of Avignon, under the care of Dr. C., for gastric fever. He recovered from this disease in due time. But being affected with gonorrhœa he was retained in the establishment, and put under the use of Chopart’s mixture, which contains a large proportion of copaiba. Soon after taking the medicine, he was troubled with borborými, accompanied with noise in the abdomen and salivation. These continued during several days; but as the pulse was not disturbed, and the skin was cool, the tongue moist, and the appetite good, those phenomena were attributed solely to the ingestion of the copaiba. Finding that the medicine did not produce any serious derangement, and that the gonorrhœa was getting well under its use, it was continued; and on the eleventh day the patient voided, both to his own surprise and that of the physician, a very long tenia, which appeared to be entire and alive. It is worthy of notice, that the patient had, for a long time prior to the attack of fever for which he was admitted into the hospital, enjoyed good health, and had experienced none of the phenomena usually indicative of the presence of such a worm in the alimentary canal.

Dr. Armstrong suggests the propriety of using the copaiba in what has been denominated the schirro-contracted rectum, on the supposition that it will keep the face in a liquid state—an effect very much to be desired—as the patients are always more easily cured when it occurs. It may he thinks from its specific operation on the lining membrane of the intestines, contribute to induce a favorable change of action on the morbid part itself. How far Dr. A.’s supposition on this subject will be verified by experience I am unable to decide, as I have not had occasion to employ the copaiba in cases such as he alludes to. Nor can I say anything positive of its use in what has been denominated anal leucorrhœa, or white discharge from the anus (Haemorrhoides alba mucose of some writers.) Montegre, in his excellent treatise on Hemorrhoidal Affections, recognises the existence of several varieties of the anal leucorrhœa, according as the disease is true or inflammatory; false or ulcerous; symptomatic or venereal; acute or chronic. In the first variety—the inflammatory; he recommends antiphlogistics; and when the urgent symptoms have been removed, and the disease has assumed the chronic form, he prescribed ecocoptric purgatives, tonics, and finally bal- samic medicines, at the head of which he places copaiba.

Montegre, however, prescribes the medicine with no other view than to arrest or lessen the discharge in these cases. But there is every reason to believe that, if it be beneficial at all in hemorrhoids, and of this there can be no doubt, it does not operate solely by virtue of its astringent properties, but by modifying the diseased condition of the tissue on which the discharges depend, and thereby restoring it to the healthy state. The only case of disease approximating to the description given of anal leucorrhœa in which I saw the copaiba employed, occurred a few years ago. The pa-
tient had long suffered under the complaint, and had been under the care of a great number of physicians, both in Europe and this country. The discharge had come on soon after recovery from a scrophulous affection, and was suspected by some to depend on a venereal taint. A variety of general and local means was resorted to in vain. The balsam of copaiba was allowed a fair trial; but although it seemed at first to diminish the discharge, and to modify its nature, it soon lost its effects, and was in consequence laid aside.

I can speak with more confidence of the efficacy of the copaiba in piles. On this subject, neither Montegro, Larroque, nor Calvert say a word. The last writer, however, remarks that in some forms of the disease, cubebs and other remedies of the sort are useful, and among these we may perhaps suppose that copaiba is meant to be included. But if the writers we have named are silent on this head, others speak in decided terms of the good effects of the remedy in the disease in question. The late Dr. Cullen was in the habit of prescribing it with, as he informs us (Mat. Med. ii. 135 Am. ed.) great advantage. He derived the practice from an empirical practitioner. Motherby states that the copaiba gives relief; Parr that it is occasioned to; Mr. Brande that it has been found effective; Dr. James Johnson that it is a valuable remedy in the disease in question. With the late Dr. Kuhn of this city it was a favorite remedy, and among our present practitioners there are, to my certain knowledge, several who will willingly join in the opinion that it sometimes proves highly serviceable. To specify the kind of cases in which it is more particularly applicable, and to point out the manner in which it operates, are undoubtedly objects of considerable interest to every physician. But on these subjects I cannot at present say more than a few words. Judging from what I have had occasion to observe myself, or from all I have heard, I am disposed to say, that when there is much vascular irritation in the parts, the copaiba will not be as useful as when this morbid state has been reduced by antiphlogistics, and the discharge consists in part of mucus. Dr. Good entertains the same opinion, and remarks that he has often tried the remedy in the disease—probably in the other varieties—without benefit. Dr. Cullen, though he does not express himself very positively on the subject, seems inclined to ascribe the benefit he obtained from the copaiba to the laxative operation of this medicine. While Dr. Good, from numerous trials, is induced to ascribe its salutary effect rather to the common principle on which it acts on the mucous membranes generally, than to the above mentioned power. On this point I have no hesitation in coinciding with the last mentioned learned physician; both on account of the effects obtained from the copaiba—without its operating as a laxative—in diseases of the mucous membranes of the lungs, bladder, and intestines; and in consequence of finding that in hemorrhoidal cases, in which it has proved eminently serviceable, laxative medicines had been used unavailing; and that it has afforded relief without increasing the alvine evacuations.
Contagion and Quarantine.

It is not a little surprising to see how slow the world is in receiving some of the most palpable truths; whilst a mere speculation, a hoax, or any thing which has about it the charm of novelty, will, like a swift epidemic, flash over the world, even if it mark its way by famine, pestilence, and death. We acknowledge with regret, the fact, not only in politics, in religion, and in commerce, but also in medicine and all sciences of capital importance. We know not how to account for it, consistently with our hopes and desires relative to the character of the human intellect. But there has always been evinced a strange willingness to receive opinions or assertions from ancestry as we would fortunes, without examination or care relative to the manner in which they were obtained. Perhaps these opinions are early imbibed from those authors or teachers whom we respect, and in whom we confide, before our own judgment is sufficiently developed for their rigid scrutiny; and having once adopted them, pride comes in the way of a just and fair criticism, and party spirit is finally aroused to their support. Or perhaps we are too lazy to undertake the exercise of our own reasoning from the evident or established facts in the premises.

In this way the world has always been, relative to the contagiousness of many diseases. And such has been the weight of numbers and character in the maintenance of the doctrine of contagion, relative to many diseases which were not so, that few have ventured to come forward with noble independence, and proscribing former mere assertions, appeal to simple facts and draw from them proper conclusions. Yet in almost every age and country, there has been a small minority who have been honest and hardy enough to go in advance of popular opinion, and occupy the firm ground of demonstrated truth, but they have been as the distant islands of the sea, or the oases of the desert, isolated and lonely. Still, such is the power of truth, though opposed for a time—though contemned, abused, and ridiculed, and every inch it claimed contested to the last extremity of power, with the help of time, great labor and new generations, and the continued pressure of misfortunes, it has been able to prevail to a good extent in particular cases. But great and systematic men seldom live to witness their own glory in the extensive prevalence of those truths which they have descried far ahead of the common mind; yet when the nobler faculties are early developed, and life protracted through many septenniads, it is sometimes the case, to a considerable extent; whilst on the other hand, the author of a false, but fanciful and captivating doctrine, will often live to reap and enjoy for a time his ill earned
honors, and, witnessing their latter end, sink into oblivion. Instances of the former are found in our own Rush, the choice home spirit of the past age; and in Dr. James Johnson, the great head of foreign medical mind of the present. The former determined for himself the fact of the non-contagiousness of yellow fever, and lived to see the mighty inroad which he had made into the policy of quarantine, against yellow fever; and, seconded and sustained by converts to the truth of his doctrine in Europe and America, who were willing to test the great truth, by even swallowing the black vomit from this disease; this truth, we had hoped, pervaded the civilized world until we witnessed, during the past year, the trammelling of commerce again by quarantine against Charleston on account of the prevalence of yellow fever in that afflicted city during the past season.

A somewhat similar ground has been occupied by Dr. Johnson, relative to Asiatic cholera, who has lived to witness the prevalence of the truth of his position. But several circumstances have tended to assist him in an easy and early arrival at this consummation. Rush had pionered with much success in the almost untravelled region of non-contagion—the way was open in regard to one disease, and the public mind somewhat relaxed from its tensive grasp on the error of contagion. Besides this, the opposition in India, when his sentiments were first adopted, was inconsiderable; whilst his character at home, for accurate judgment, was fair, and without the opposition of claims on alleged facts of experience, as the cholera had not yet pervaded England. Still, however, when it did appear, a storm of contention from benighted Russia, with its more pestilential breath reached Sunderland, and for a short time, spread dismay over the great metropolis. But, as after the first shots in battle, the dismay soon passed over, and the public mind received the dignity of truth for which it had been so well prepared. We are pleased to witness these conquests of truth over error, not only for the honor of the human mind, but for the benefits of commerce; and above all, for the good of humanity. It would be behind the advance now occupied by the enlightened and liberal minds of the present day to enumerate the injuries to humanity which necessarily attach to, or rather result from, the fact, or the mere idea of contagion. Let it suffice, to say, that there is no promise of success in preventing or curing a disease, the cause of which is not understood to some good extent; and that, whilst the attention is captivated and absorbed by the cry of contagion, all other sources of causation are neglected. There are yet many other diseases for which, from the foul charge of contagion, humanity cries aloud to the mental energies of the land. And we trust that those who are within the call will not be backward in coming up to the rescue. Meanwhile we extract from the proceedings of the British Association for the ad-
vancement of science, as contained in the Eclectic Journal from the Athenæum, the observations of Dr. Boring on Plague and Quarantine, as follows:—

Dr. Boring apologised for coming before the Section, he not being a medical man, but having travelled in the East for the purpose of observation in reference to our commercial relations, his attention had been naturally directed to the subjects of plague and quarantine—subjects the importance of which could hardly be overrated, many millions being annually lost to this country from quarantine regulations. The results of his observation had produced a strong conviction of the non-contagion of plague; and he thought it right therefore, to lay before this Section a few remarks on the subject. He alluded to the very secondary character of the facts, on which the prevalent opinions were founded. Some were so absurd as not to be worthy of the slightest attention; such as plague being introduced at Leghorn, by the unrolling of a mummy that had been buried for 2000 years, at Constantinople by the wing of a bird having touched a kite which a boy was flying from a house top,—from a cat having been seen to jump into a basket in which were some clothes, from which the disease was subsequently caught. Dr. Bowring said, that physicians residing in the East were rapidly changing their opinions on the subject, but they were prevented in many instances from freely expressing them, by the interested Boards of Health, who neither liked to part with their extensive power, (even of life and death,) or with their salaries. Clot Bey was a decided anti-contagionist, and that after an experience of 8,000 or 10,000 cases. Dr. Bowring mentioned many cases where facts were distorted, or invented to account for cases of plague from contagion; and in one remarkable instance, where the misrepresentations were exposed, it was denied that the case was plague at all, because they could not maintain their assertion of contact having taken place. The Mussulmans are by their religion non-contagionists, and Dr. Bowring hoped they might never become otherwise, as the aggravation of the calamity would be tenfold if they did. The opinion as to the contagious nature of the disease prevailed principally amongst the Levantines and Franks; but every other superstition was as readily believed by them. He had collected the most solemnly attested evidence of the appearance of Peris and Genii, and of the intermarriages of the former with mortals: he had collected more strongly-attested facts on these subjects, than on the contagious nature of plague. Dr. Bowring asserted that, from innumerable instances, quarantine appeared to give no security, and was of opinion that these establishments were mere political engines, of great power and convenience in a despotic country. In the lazarettos the whole correspondence of the East was read. The Russians had a most perfect system of quarantine, yet the plague got into Odessa. In 1831 quarantine and lazaretto establishments were introduced into Egypt, under the superintendence of the Consuls, yet the plague got into Egypt. In Jaffa it broke out in the house of the Russian Consul spontaneously, and in Jerusalem in a convent, with which there could have been no communication. In the lazarettos, a little disease was made a great deal of; in one instance a greater number died from dysentery than from plague. Lazarettos, he continued, rather increased than diminished the evil. If a strict separation could ensure safety, the Pacha's harem would escape; yet in 1835, seven died there of plague. It appeared at one time in Old Cairo, and not in New, and vice versa, although there was constant communication; the same was true as to Cairo and Alexandria. The disease never penetrated Nubia, though constantly on the borders, and frequent intercourse taking place. In Cairo on one occasion 400 or 500 houses, whose inhabitants had all perished, were subsequently opened, the linen and clothes in
them sold in the market-place, without any cases of plague resulting. Clot Bey had again and again inoculated himself without producing the disease. Dr. Boullard wore the clothes of a patient, who died of the disease, for twenty-four hours, without catching it. The following information was communicated to Dr. Bowring, by a physician of long experience, in answer to a series of direct queries, viz: that it is indigenous in Egypt, never entirely absent, never imported, that it frequently occurs spontaneously, that cordons afford no security, that contacts very frequently did not produce it, and that the most cautious frequently suffered from it; that free ventilation was effective in checking the disease, that it was not produced by linen which had been exposed to the infection, and that when a number of persons exposed to its influence removed from the spot, the mortality became much diminished. Dr. Bowring concluded by expressing his own strong conviction on the subject; but he had no object but to promote the discovery of truth, which could only be done by patient and serious inquiry, and by evidence of a primary character.

Dr. Lynch begged leave to propose a resolution, to the effect, that Dr. Bowring's paper should be published.—Mr. Greenhow could not but remark on the strong analogy, which existed between the statements of the learned gentleman on plague and lazarettos, and the events which occurred in this district relative to cholera and cholera hospitals. He also requested Dr. Bowring to furnish a copy of his observations to the Secretaries.—Dr. Granville opposed the motion of Dr. Lynch. The communication he contended was not strictly medical; it was political, not pathological: he must oppose too the deductions of Dr. Bowring; he was not indeed present at the commencement of his address, but that was the less necessity as he had heard the whole subject in detail, on board the Ocean steam-packet. It was not by declaiming on the superstition of the Levantines, or by the eloquent introduction of Peris, Genii, and Vampires, that a strictly pathological question could be decided, nor by false inferences from bad Boards of Health. The chairman interrupted Dr. Granville, by protesting against this line of personal attack, and allusion to what had taken place elsewhere. After some desultory observations, Dr. Lynch's motion, somewhat modified, was passed. Dr. Granville then begged leave to propose that the Committee should make application to Her Majesty's Government for a grant to be applied to the purposes of inquiry into the important subject of the contagious or non-contagious nature of plague. This motion was passed unanimously, as also one of thanks to Dr. Bowring.
Prolapsus Uteri.

We give place to the following correspondence on the subject of prolapsus uteri for several reasons; a few of which are considered sufficient.

1st. Because the letter requesting advice contains a very accurate description of the most common cases of this disease, and an independent, rational, and accurate diagnosis by its author, who is professedly, not experimentally acquainted with the disease; and by which, cause and effect—phenomena too commonly transposed—are placed in their proper relationships in the concatenation of phenomena attending this disease.

2d. The symptoms or secondary morbid phenomena produced by this disease, are generally treated as primary, whilst their cause, without the removal of which, no permanent good may be expected to result, is generally neglected, or most inefficiently treated by practitioners.

3d. The reply to that letter is about such as the author is so often compelled to write to his professional brethren, that he hopes, by its publication to supply at once, to many, those remedial suggestions, for writing which promptly for individual cases, his engagements do not allow him leisure. He hopes therefore by this measure to prevent injurious delay in such cases, and to save to himself many hours.

Through motives of delicacy, the names and location of the patients are omitted.

"W—— S——, Feb. 20th, 1839.

Dr. Antony:—

Though not personally acquainted with you, yet your high professional character, and the confiding esteem with which I look up to your practical skill, induces me to address you this letter, and to ask of you the benefit of counsel and advice.

The case in which I wish your direction and advice, is that of Mrs. ———, aged about 20, and lately married. Mrs. ——— is of sanguine temperament, and strumous diathesis, with light hair, fair skin and blue eyes,—an intellect highly cultivated, and a lively imagination that delights in the wild and fanciful. For some years past, she resided in ———, and only very recently, has removed to this state; and still more recently, placed herself under my professional care.

In asking of Mrs. ——— the history of her case, and the char-
acter of her disease, I was informed by her that her disease was a pain in her right side—that it had existed for five years, gradually increasing; and that her medical advisers had treated her case as a chronic hepatitis, with a variety of medicines with perfect ill-success.

Though my acquaintance with Mrs. — was very slight, still I could not believe that the cause of her ruined health was an affection of the liver. Her lively disposition, her gay repartee, and her animating sociability were the very opposite of the mental and social character of one suffering from chronic hepatitis. Her face was pale, but not jaundiced—her eyes swollen and surrounded with a yellow circle—great excitability, and great lassitude on the slightest exertion, accompanied with an increase of the pain in her side. From such symptoms, I thought it probable that her physicians might be in error in diagnosis in her case; and that, instead of ascribing her ill health to primary hepatic derangement, it might be more truly referred to the powerful influence exerted on the whole system by derangements of, or diseases in, the genitalia. With this impression, I examined my patient as minutely and accurately as my competency enabled me; and from the examination learned that she had pain in the right hypogastric region, extending from the inferior margin of the ribs, downwards into the groin, frequently into the thighs, and often even to the leg and foot of that side—a dull pain or sense of uneasiness in the sacral region, with a sense of dragging weight when she was long in the standing position, and after taking exercise by walking, or riding on horseback or in a carriage. She was frequently annoyed with tenesmus and strangury, with flatulency and pain in the bowels. Her catamenial returns were irregular and painful, and she was affected with leucorrhœa, not in its first stage or mildest form.

With this knowledge of the symptoms I informed my patient that I looked on her disease not as hepatic, but as uterine—i.e. prolapsus uteri as the original disease, and dysmenorrhœa, &c., as consequences of the primary displacement. To verify my diagnosis, I requested and was permitted to make a vaginal examination, and thus found the os uteri resting on the perineum; its lips anterior and posterior, and its neck enlarged, indurated, and painful, &c.

Such is a very hasty and imperfect history of the case in which I wish your counsel. I might add many other symptoms; but your thorough knowledge of this class of diseases, and perfect familiarity with all its symptoms render it unnecessary.

I may add that, in treating the case I inserted an oval glass pessary, (2 1-8 inches,) but found, as I anticipated, that it increased, very much, the irritation of the os tineæ, and after a few day's trial, its use was necessarily discontinued from the
present. I then ordered rest, recumbency, low diet, semicupi-
um, cups to the hypogastric and uterine regions, and a laxative pill, night and morning, composed of aloes, sulph. ferri and the sulphuret of antimony and gum myrrh.

Such is the present condition of the patient. I hope you will do me the favor to write me, and all suggestions in the treatment of the case will be thankfully received by your friend, &c.,

J. W. H.

DEAR SIR:—

You could not have described more accurately than you have done in giving me a history of Mrs. ——'s case, a common case of prolapsus uteri. Indeed the case is one, if I may so speak, remarkable only for the fullness of symptoms which most fully characterize its nature. Judging from your history, I must say then, that your diagnosis, which is that prolapsus in the primary affection, and dysmenorrhœa, leucorrhœa, dysury, constipation, all hepatic symptoms, &c. &c., are but its symptoms and consequents or effects, is perfectly correct. Some of these may, however, demand treatment, as well as the primary affection; for, although we may not expect effects to cease whilst their causes continue, still it is often the case that the removal of causation does not remove all the effects it may have produced; and these require the intervention of art. But in such a case as this, it is often delightful to the practitioner to observe how abundantly the powers of nature suffice to correct the ill effects of this cause when it is removed. I have often the satisfaction of finding all such symptoms or effects speedily to vanish on the correction of their cause, without one dose of medicine; and especially in such temperaments as Mrs. ——'s, which is, more than others, calculated to surmount hepatic injuries. I would therefore advise

1st. The correction of the cause, according to the diagnosis you have so accurately made—observing, as the case progresses, the condition of the effects, and giving such assistance as nature evidently demand, and no other; because medical treatment tends to produce debility, whilst the reverse you will need to assist you in the cure, as well as to perpetuate it; and tonics, except occasionally the shower bath, are most commonly contra-indicated by different local excitements, visceral derange-
ments, &c.

The uterus must be considerably engorged, at least about the cervix. This endangers ulcerations or other consequences, not only difficult of cure themselves, but also calculated to interfere with your convenience and success in treating the primary disease. Let the uterus therefore be restored to its proper site as promptly as possible, and kept so. This is the great indication.
Merc position, the good itself, and necessary, will not, alone, suffice. The patient must be first placed in such a position as to secure the full power of gravitation in drawing the uterus in the direction of the upper extremity of the axis of the superior strait of the pelvis, which is in the direction of the umbilicus. Whilst in this position, the abdominal muscles must be relaxed to prevent them from counteracting the gravitation; whilst the vulva is to be dilated to admit the influence of atmospheric pressure into the vagina. Thus attracted by gravitation of the uterus, and forced by atmospheric pressure, the uterus is brought more or less completely to its proper site; any deficiencies of which may then be corrected by placing the ball of one finger or more, carefully on the os uteri, and co-operating with the forces already in use, in the same direction, as far as can be done, without much pain. Whatever deficiency may yet remain in consequence of surrounding engorgement or inflammation, will be easily corrected at subsequent attempts; for it is often the case that the restoration cannot, by prudent force, be fully effected at the first attempt. The patient remaining thus, a wash should be thrown into the vagina by means of a good womb syringe, and the vulva closed and compressed by a napkin and the hand, until the hips are carefully placed on a pillow, without the muscular efforts of the patient.

If there be much irritation, the wash should first consist of 4 or 5 grains of sub. acid. plumb. to the ounce of water. But if otherwise, should consist of about 5½ sulph. alum. to the pint of water, or a strong decoction of red oak bark, or a decoction of 5½ of powdered galls, well boiled in 1 pint of water. The two last are preferable, because more permanent in their tonic effects on the parts.

This treatment or dressing should be repeated twice or thrice a day. After some days, if the improvement be such as to induce the hope that she may be able to sit up for an hour or two without injury just before the dressing, she should do so, because it is too enervating to be long confined to bed; and especially in the position above pointed out. If, on this trial, she be found to remain uninjured, she may rise earlier subsequently, according to her improving ability, until, at last, she may be up all day after an hour or two from the time the wash is used in the morning; and finally, omit the morning use of the wash, retaining only the use of it at night, until the cure is completed. The washes must be carefully avoided from two or three days before the time for the menstrual return, until it is over—continuing the replacement, with great care, if necessary, during the whole menstrual flux.

Should such means be found insufficient, a pessary, or uterine prop should be introduced, so as to prop the uterus up to its proper height. This should be applied and worn through the
menstrual period, if she should not be able to menstruate well without it. It should be made of carded wool, built up into the shape of an hour-glass when wrapped around the middle with a thread, which is necessary, to keep it well together. It should, when done, be 2½ to 3 inches long, and should have a strong string passed longitudinally from the lower to the upper end, through the centre, and returned. This is for the double purpose of drawing the upper end into a funnel shape for receiving the os uteri, and for the convenience of extracting it, when necessary. If it be introduced through the vulva, and placed in the lower part of the axis of the superior strait, when in this place, the upper end will receive the os uteri, and the lower end will rest in the fossa over the perineum and behind the vulva, so as to keep it from easily protruding through the vulva, or compressing and irritating the urethra. With this in use, the patient may be up the most, or all of the day. But when it is removed, she must be very rigidly treated with position, and strengthening washes until retention is effected. This pessary, you will observe, is not to be used unless proved necessary by the circumstances above detailed. The patient should not be annoyed by any of the other pessaries, as they neither tend to assist in the cure, nor serve to retain the uterus up to its proper site. The best they can do, is to prevent procidentia, or the actual falling out of the uterus, when cure becomes hopeless. Concupital intercourse should be absolutely interdicted, as it can scarcely fail to irritate the uterus and relax the vagina—two efforts incompatible with curative purposes.

With these views, I hope you will be able to extend to your patient that assistance which is so much needed, and than which, none is more important to her comfort and safety.

M. ANTONY.

Dr. —— ——

J——, B—— Co., 8th March, 1839.

DEAR SIR:—

I am anxious to obtain your opinion and advice in regard to a most singular and obstinate case now under my care, and which I will proceed to relate.

Mrs. ——, now in her 54th year, enjoyed general good health until five or six years ago; when, on attempting to raise a heavy burden, she perceived, (to use her own expression,) "something give way, or pass down, internally." On investigation by herself, it was found that the uterus had prolapsed to near the vulva. In this situation it continued for several weeks; at the end of which she attempted the correction of the displacement herself, and continued better thereafter, for a few days; when, on taking considerable exercise in walking, the prolapse returned, but not to so great an extent as at first. The
womb remained however, within about one inch of the vulva, when she was erect, for the two following years; but when in a horizontal position it returned to its proper site. During the third and fourth years, copious leucorrhæa existed, which added greatly to her alarm and uneasiness; but she could not be prevailed upon to employ a physician. The prolapse and leucorrhæa discharge rendered her exceedingly unhappy and distressed in mind. Thus she continued in this dreadful situation until the middle of the fifth year. She now discovered considerable tumefaction of the neck of the uterus, attended with frequent and copious hemorrhage. She was now induced to call on me for advice in regard to the hemorrhage. I found her weak and reduced, and prescribed astringents and tonics; with the desired effect of suppressing the hemorrhage and the leucorrhæa to some extent; but a gradual hemorrhage still continued. Some three or four weeks since, she desired me again to visit her. At this visit, I found her situation indeed alarming. The hemorrhage excessive, general fever, pulse quick and 120 to the minute, tongue unexpectedly in a natural state; bowels much constipated, having had no operation for the last seven days; vomiting every hour or two; and for the last three days, every thing taken into the stomach has been immediately rejected. I now resorted to such cathartics, diaphoretics, astringents, revulsives, &c., as I found necessary. The use of these ended in the removal of the fever, constipation, hemorrhage &c., and the discharge of much bilious secretion from the bowels, to her very great relief.

My preceptor, Dr. John Sanders, was present at the time with me, and we attempted to make an examination per vaginam, on which the uterus was found, as above stated, within an inch or inch and a half of the vulva; the os and cervix uteri enlarged and much indurated, conical, and presenting to the touch a horn-like feel. The os uteri was not occluded, and on pressure the uterus was almost perfectly immovable in every direction. Free hemorrhage was produced by the attempts to move the uterus; it was however promptly counteracted by styptics. The fact was strange to me, that on the cessation of hemorrhage, leucorrhæa supervened, and vice versa. There was some pain in the lumbar region, but it is remarkable that in the neck and mouth of the womb which appeared to be the chief seat of disease, the patient had not suffered the least pain; but she declared it had not pained her the first time. * * * *

In our treatment of this horn-like induration of the uterus, we resorted to revulsives, blistering, &c., to no good effect in reducing either the tumefaction or cornuous hardness of the enlarged and elongated cervix. From fear of the insufficiency of the belladonna ointment to so relax and soften the tumor as to enable it to yield to pressure, I have not yet given it a thorough
trial. The hemorrhage and leucorrhœa, neither of which is, at the present time, very reducing to her system, can be suppressed for a while.

Your opinion, in regard to this afflicting case is earnestly solicited. What would be your treatment? To an operation, though it might promise the greatest success, she would not submit. Can you refer me to just such a case? How can it be, that she has been clear of pain about the cervix which is so extensively affected? Please give me an immediate answer to all that I have requested, and accept my best wishes for your health, prosperity, and future happiness.

Yours, &c., SIMON H. SANDERS.

M. ANTONY, M. D.

AUGUSTA, 11th March, 1839.

In reply, my dear sir, to your request of my "opinion in regard to the afflicting case" you have described in your letter of the 8th, I say you have given me a minute detail of a progressive case of prolapse of the womb, with several of the important results arising out of that species of genital prolapse. These succedania, which are, by an error too common in the profession, usually looked on as primary diseases, and treated accordingly, are very numerous. In the present case, however, they are limited, so far as you have noticed them, to engorgement and consequent indication of the os and cervix uteri, menorrhagia and leucorrhœa; and perhaps some nervous derangement and disorder of the digestive and hepatic functions. The three first named are however the subjects of your chief reference. I am pleased to observe that you have not committed the very common error of considering them primary, self-existent diseases, or related to the prolapse as cause. They are evidently effects, and not causes of this displacement. This is proved by reasoning both ways. They are all, effects precisely in the line of direction, so to speak, of the prolapse as a cause, and are proportionate as effects to this, as a cause; and phenomena most uniformly following this. This, it appears to me, must be evident to every good anatomist or observer whose mind is unbiased by the partial views of writers and teachers on this subject. They are just such effects as we see, almost consequently follow this cause—varying however in degree, proportion, &c., with the age, temperament, and various conditions and circumstances of the patient. And they are proved to be effects, by their constant correction—by the timely removal of their cause, for those phenomena which disappear on the removal of certain antecedent phenomena must, in fair reasoning, be considered the effects of those previous phenomena. This is clear and indisputable, in pathology, notwithstanding the fact that sometimes the causing or antecedent phenomena may be removed without
The removal of its consequences. The cause of this difference of reasoning in pathology and physicks is, that the animal structure is subject to new and consecutive causation to which physicks, abstractly, are not—that is, morbid lesion or injury of parts to such an extent as to constitute a self-existent disease; or one which can continue by virtue of its own peculiar circumstances. Such is the case with a wound inflicted by any violence. The contusion, laceration, or division of parts continues, although the cause is but momentarily in action. The same of diseases produced by cold, as a pleurisy, a catarrh, a rheumatism, or an inflammatory fever. These continue self-existent—that is to say, they are, when once produced, perpetuated by their own inherent circumstances, notwithstanding the cold which was a cause, without which they could not have occurred, is no longer in operation, and so forth. Another reason is the peculiarities of animal nature. This is one of the most important points in diagnosis, and one in which the most frequent and fatal errors in practice arise—I mean properly distinguishing between causes and effects. The error arises, without doubt, in many cases, from the too strict application of the rules of reasoning in physicks, to pathology, in which the principles of life are concerned, and must necessarily introduce new and consecutive causation calculated to modify the results; but which is overlooked in the reasoning. And what must be the unavoidable result in such a case as that before us, for example, but the neglect of the causes and their continuation in operation, and the consequent perpetuation of their various effects? Hence the great, general indications, remove causes and correct their effects.

But the case before us is too palpable to be misapprehended. An evident and competent cause existed; its legitimate effects were soon so plainly manifested that the patient herself, without medical mind with which to investigate, detected the effect of this cause, and cause of subsequent phenomena, which was prolapse. She attempted to correct this effect, (all that was to be done, as its cause was no longer in operation.) Relief followed in just proportion to her success in fulfilling the indication. But when, (the parts being weakened, the same effects were more easily induced than at first, which is a proper predisposing cause, calculated to modify the results from other causes,) a new cause, as a fatiguing walk, &c., was applied, the effects were, as they must necessarily have been, renewed; but more gradually, and hence the progress and continuance of the prolapse, and consequently, some of its effects, without suddenly arousing the sensibilities of the patient. The parts thus becoming gradually injured, disease has been allowed finally to progress to great extent, without sensible distress in the chief seat of engorgement, to which the sensibilities of the part have become gradually habituated. I have often produced more actual
pain, for a short time, by adjustment of the uterus, than had been experienced in the part by the patient previously. To this, I may add that engorgement, hypertrophy, and even scirrhus, may exist to a very considerable extent, without much pain in the part of the uterus affected. Indeed, we are often surprised to find, on examination, either of these; when, from the external symptoms we had no reason to expect it.

Having replied to two of your inquiries, I shall now proceed to speak of the treatment.

In regard to this, I must say that much depends on the particular impressions received from the manual examination by one's self. Certain it is that the general indications of removing the cause and obviating its effects, exist prominently in the case, and their fulfilment will be very apt to control the troublesome menorrhagia and leucorrhœa by which you have been so much perplexed. Your experience in this case is enough to prove to you the inefficacy of prescriptions directed immediately to these, regardless of the cause—the prolapse; your success, after extensive trials being but partial in degree, and temporary in duration.

The first of these indications is to be fulfilled by restoring the uterus to its proper site in the upper part of the pelvis, with its axis in relation with that of the abdominal strait. This is most easily and effectually done by placing the patient in a position in which gravitation, acting on the uterus in conjunction with atmospheric pressure, will tend to draw this organ towards the umbilicus. Whilst in this position care must be taken that these forces be not counteracted by the pressure of the abdominal muscles. These being perfectly relaxed and continued so, the vulva is to be carefully opened for the free admission of air. Then will the two forces above named be in full action. Should it be the case, as it sometimes is, that from surrounding engorgements, tumefactions or adhesions, the uterus fail to pass to its proper place, the soft ball of the index finger is to be carefully placed on the os uteri, and pressure made in the direction of the axis of the superior or abdominal strait, so far as it may be without giving much distress, until the uterus is forced away to the upper extremity of the vagina. Be not discouraged, if this effort produce no very perceptible change in the position of parts; for this is often the case, when the engorgement is considerable. But when all is done which can be prudently at one time, the patient is to be carefully placed on her side, with her hips on a pillow. This should be daily tried, on which it will generally be found that the mobility of the uterus gradually increases, until it is totally restored to its proper site. This accomplished, the second indication is to be fulfilled by applying to the vagina by means of a good womb syringe, such discutient and astringent washes as are calculated to remove any inflammatory
condition which may still remain, and renew the contractile energies of the vagina, in which the enlarged uterus has been so long nestled. These may consist of a strong solution of about 5 grains of sub-acetate of lead to the ounce of water—a strong solution of something like 5, 6, or 7 drachms of sulph. alum. to a pint of water—a strong decoction of oak bark, or of 8 or 10 drachms of Aleppo galls to 20 ounces of water, boiled down to 16. Some one of these, according to the circumstances of the case, should be applied once or twice a day, immediately after rectifying the uterus, and in the same position in which this is done; after which, a napkin being firmly pressed against the vulva, the patient is to be carefully placed on the pillow as before. But previous and subsequent indications may exist. It may be found that there is entirely too much engorgement for the rectification of the womb. In this case the previous indication will be to reduce the engorgement preparatory to the replacement. For this purpose, leeches applied to the os and cervix uteri, with a proper regulation of the diet to prevent repletion, with occasional warm hip baths will be best suited to the purpose. Cupping low on the hypogastric and iliac regions may be considered advisable, on the impossibility of applying leeches to the os uteri; but cupping or leeching on parts other than the actual seat of engorgement, or parts having immediate vascular connexion therewith, amounts to nothing more than a poor general bleeding. It is a great error in practice, to exercise topical depletion otherwise, although greatly indulged in since the days of Broussais, to the great annoyance of the patient, and imprudent profit of the practitioner. It may be found also that visceral obstructions exist elsewhere, as effects of the primary disease, or irritations set up in other parts, as the liver, spinal marrow, &c. These afford subsequent indications, which should be fulfilled by the means usually suited to such cases. And I will here remark, that the treatment of the liver, by occasional slow mercurial purgatives, is one of the most important means at command for promoting the disgorgement of the uterus. If this uterine engorgement is decidedly chronic in all its character, an alternative course consisting chiefly of Plummer's pills will be found serviceable.

As to the operation of amputating the cervix uteri, the patient is wise in opposing it; it has been greatly abused, and its chief promoter has already outlived its glory.

You ask to be referred to such a case. I refer you therefore to the whole work of Duparque on the uterus, a recent work of more value on the subject than any other extant, and replete with cases of morbid affections of this kind. His cases are finely descriptive, and the only considerable fault I find in the work, is the want of sufficiently strong views of the influence of uterine prolapse as a cause. This deficiency must of course
extend its influence in a considerable degree to the treatment. Still, in justice I must say that in this particular, Duparque has decidedly improved the previous state of knowledge on this subject. I could also refer you to many cases of the same pathology, in my own practice, successfully treated according to the views here detailed. Yours, &c.,

M. ANTONY.

Dr. S. M. Sanders.

Injury of the Urethra from Prolapsus Uteri.

In addition to the above cases, and to show one amongst many of the curious varieties of afflictions which so often arise from prolapsus, we record in this place, with the patient's consent, a case which is now on hand.

Mrs. Mc—, of the state of New York, placed herself under our care on Wednesday, the 13th of the present month, (March.) She is 28 years of age, well proportioned, but rather taller than the medium stature, sanguineo-bilious temperament—the former predominating; eyes dark grey, and hair black. Her bowels tend to constipation, with a sense of obstruction at the rectum. She has been many years married, but has never conceived. Her menstruation has been accelerated to less than three weeks from the beginning of one flux to that of the next; attended with pain about the loins and hypogastrium, and numbness and pain in the thighs. She has suffered now for several years, great and increasing distress in menstruation, exquisite tenderness and considerable swelling of the urethra, and particularly at the punctum, from which, a preternatural growth—fungous, from her description, arose to a considerable magnitude, and about half the length of her thumb. This was exquisitely sensitive, affording blood on the slightest violence, exquisite distress on urination, and a small quantity of yellow purulent discharge from within. She has never suffered from any infectious disease. In this state of the case, when under the care of Dr. S******* of the state of New York, she suffered the removal by the knife, of the extraordinary growth at the outward extremity of the urethra; but the part from which the excision was made remained denuded, exquisitely tender and painful, and with the whole urethra, swollen to double its natural size, until she came under my care on last Thursday. Dr. S. had attempted to pass a small female catheter, but it was so much resisted by the swelling of the urethra, and afforded so much pain, that it was abandoned as impracticable. She had been habituated, through her whole life to tight lacing, during
which, the increase of distress produced by this cruel practice, has effectually prevented its continuance.

On investigating this case on Thursday last, the os uteri was found tightly impacted in the angle between the perineum and rectum, while the fundus was firmly pressed against the urethra near its vesical extremity, and the whole volume of the uterus unusually hard and somewhat enlarged. The careful examination of the uterus gave great pain, chiefly in consequence of the extreme soreness of the urethra from the uterus outward.

In all these phenomena of the case, I saw no more than the situation of the uterus seemed to me competent to produce. The correction of this organ appeared then to be the only important indication in the case; and I therefore attempted, but with only partial success, to carry the uterus higher in the pelvis and bring its axis into relation with that of the abdominal strait. With this attempt, the patient was left, on her side, with a pillow under her hips, until the next morning.

Thursday Morning, 14th.—I found the patient still complaining of much pain on urination, but on examination it was obvious to her that the tenderness was less exquisite; and I found that the uterus had more mobility. It was then replaced to its proper site with considerable ease, and she was again placed in position, on the pillow. Thursday evening I found the sensibility and swelling at the point decidedly lessened, and applied a lotion to the vagina by the means of a womb syringe, with a small curved pipe, consisting of Div. sub. acet. plumb. and 1 pint of water.

Friday Morning, 15th.—Found her perfectly comfortable, having urinated twice since last evening, with freedom and ease. It was yet perceptible to her that the outward extremity of the urethra was not healed, but its morbid sensibility as well as the general swelling of the whole urethra was greatly reduced. The saturnine lotion was again applied in the same manner.

Friday Evening.—Having passed the day very comfortably she had ventured to spend an hour or two out of bed previous to this visit, and complained of pain again in the urethra. On examination it was found that the uterine displacement had to some extent returned. It was now promptly corrected, the lotion applied, and position strictly enjoined. The distress vanished immediately, nor was there any remaining swelling or increased sensibility.

Saturday Evening, 16th.—Replacement had been well preserved and all the morbid enlargement and sensibility of the urethra seem to have disappeared. The lotion and position continued. The inflammation being subdued, an astringent lotion consisting of 3 i. of bruised aleppo galls, put into 3 xx. of water, and boiled down to 3 xvi., ordered for to-morrow, should there be no return of inflammation in the part.
Sunday, 17th.—The patient is doing well to-day. No unnatural tenderness nor swelling remains. She is now advised to use the vaginal injection of decoction of galls.

Take bruised Aleppo galls, ʒ j.
Water, ʒ xx.

Boil down to ʒ xvi.

Inject, morning and at bed-time.

It now only remains to secure that energy of the vagina which is necessary to close the dilatation which the uterus has made by being long nestled in it, and which is indispensable for preventing the easy prolapse. It should be remarked of this case, that it is not sufficient, in the replacement, to secure the due elevation of the uterus to its site in the hypogastrum; but that anteversion which caused the injurious pressure of the fundus on the urethra, still causes the fundus to incline forward of the axis. This needs correction at every application of the lotion, by drawing the os and cervix uteri anteriorly until the axis of the uterus is in relation with that of the superior, or abdominal strait of the pelvis; for unless this is done, the due contraction of that portion of the vagina against which the os uteri presses, which is the upper and posterior part, cannot be secured.

It is useless to give further details of this case, which is yet, and will be for a few days more, under our care; after which, the patient will leave for the north. The strengthening lotion will still be necessary for some time, in order permanently to overcome the relaxation of the vagina which the long continuance of this genital prolapse has produced. Her menstrual period is within a week; she will therefore omit the lotions a day or two previous to that period, and carefully preserve the replacement during the term, and return to the use of the lotion after the menses cease.

Wednesday, 20th.—We have pleasure in stating that she is discharged, apparently well; yet we apprehend that her travel to the north will re-produce some of her distresses, which will require farther treatment of the same kind when she arrives at home.

Friday, 22d.—Our periscope being open until this time, gives us the opportunity of stating that we called on the patient to-day, and find that her menstrual flux commenced yesterday with ease and regularity in all respects, and continues in like manner to-day. To-morrow, according to her course in health, it will decline.

Editor.

Hydrophobia.—It is to be regretted that cases of disease of the deepest interest, as well as anatomical and physiological
Hydrophobia.

facts occur within, and even under the knowledge and supervision of medical men, which are left to the common people to be reported; and to be, consequently, subjected to all their whims, caprices, fears, prejudices, imaginations, &c. This is more especially to be deplored, when the cases are of such a character as the profession needs light upon; and this is abundantly the case with regard to hydrophobia, a disease so differently and often, without doubt, so erroneously defined or described. It is a disease, at least, in regard to its appearance in the human species, of such rare occurrence, that it falls to the lot of but few physicians to observe even one genuine case. Still such are the horrible descriptions of it, and such the just terror of the community on any occasion of alarm, that the faithful practitioner feels extremely unhappy with the idea of meeting a case of it without even the means of diagnosis. In the case before us, we are informed of the attendance of several physicians, and still the case appears not from either of them; but comes to us in the New York Star, rather as a puff to the East India Medicine, or spiritus vitæ, than as a medical report.

We are aware that very many cases occur and wear the name of hydrophobia which are really not that disease. We have often been called to treat such cases, but have never yet met with any thing we could consider hydrophobia. One case in particular, the recollection of which is fresh in our mind, attracted our attention whilst travelling through Alabama in the early settlement of that country. It was so strongly characterized, that we were induced to go considerably from our way to see it. The girl who was the subject of it was about 11 years old, and had been bitten by a small dog which came unexpectedly into the house some three weeks before, bit her heel, and left the house immediately. Without naming all the symptoms, we will only state that several persons were engaged in holding her in such a manner as to keep her from biting, whilst water was occasionally poured within her hearing or sight, or offered to her for drink, in order to produce a display of those spasms, which are said to occur under such circumstances. We remained with this case about an hour, taking the whole management of the patient. We first liberated the hands, head and feet, from those who were holding them, searched for the wound on the heel, the scar of which could not be found—indeed, the family had forgotten on which heel it had been inflicted. We conversed with her, and before we left, she was quite tranquil, as to actions, and even drank water twice, without any appearance of spasms being excited thereby.

We could not remain to make further investigations of the case, but believed that her nervous excitement was probably the effect of worms, and alarm relative to the dog-bite.

We give Dr. Good's characters of this disease; and extract
the case to which we allude, as it now appears in the Eclectic Journal of Medicine from the New York Star.

"Rubies.—Spasmodic constriction of the chest; supervening to the bite of a rabid animal; preceded by a return of the pain and inflammation in the bitten part; great restlessness, horror, and hurry of mind."

Hydrophobia.—There has been lately published, in the New York Star, a wonderful account of a case of an alleged cure of violent hydrophobia by the outward application of what is called the East India Medicine or Spiritus Vitae. The subject of the attack was a young female of the Society of Friends, named Ann Dickers, residing in the middle road, in the neighborhood of the Deaf and Dumb Asylum, New York. This person, twenty years of age, was, it is said, bitten, in the month of April last, "by a dog which had been given to the family by a neighbor, named Churtes; but which circumstance she did not at the time make known to any one, in consequence of her father having frequently warned her against playing with dogs—she being fond of sporting and teasing them. Soon after receiving this bite the dog had previously exhibited symptoms of being rabid disappeared, and nothing has since been heard of it." So far the preliminary history—which, it must be admitted, is not very clear.

On a Sunday evening, in the latter part of October, or beginning of November, up to which time Miss Ann had enjoyed full health, she first began to manifest strange feelings, among which was distress at the sight of a pail of water, which her sisters had taken up to their room; afterwards, though, she poured out tea, but did not drink any, "she appeared to look wild, and started off on seeing the gravy with some meat which her sister took from the stove. Going to bed, she felt a paroxysm coming on, and told her sisters to fly, intimating she was mad; they got out of her way, fearing that she would injure them. "We all," says one of her sisters, "ran up in a fright, seeing she was in dreadful spasm, the foam coming in thick masses from her mouth, her eyes glaring, and her whole appearance being altered." After this (her father had arrived in the room,) Ann voluntarily held her arms back to be tied, and one of the men who were let into the room did go up and tie her. "She then threw herself wildly on the bed, her face downward, and began to bite and tear the pillows and bed-clothes. After the first spasm she repeatedly exclaimed, 'Oh! it's Churtes's dog! it's Churtes's dog! it's all over with me—I know it is! 'twas Churtes's dog!'" This was the first time, says the deponent, her sister, that we had known about her being injured by that dog. "She had been bitten in the nose three or four days before her illness, by a little pet dog, but we thought that had got well." "Her barking, howling, and growing were hideous, and exactly like a dog."

Drs. Rawson, Baldwin, and Lindsey are mentioned as having visited and prescribed for the patient. The last named gentleman "came and tested the disease by calling for water; water was procured, but she did not see it—she only heard it being poured into the glass, and the spasm produced by it were dreadful in the extreme, continuous, and truly frightful. All the spasms were not attended with barking, but the most were. The barking continued until next day," Dr. M'Niven and son visited her on Monday night. Nothing prescribed was of any service; indeed it is said she did not swallow any thing. About a pint of blood had been taken from her, the first night of her attack.

Mr. Jennison's East India Medicine or Spiritus Vitae was first applied on Tuesday morning, with the consent of Doctors Baldwin and Lindsey. "Her throat was bathed with it; then a tobacco poultice was ordered to be applied by the physicians to her throat and bowels. Mr. Jennison then came, re-
moved the poultices, and applied the East India Medicine freely to her hands, throat, head, feet, and the joints of her limbs, by the permission of Doctor McNevein, to whom the operation and properties had been explained." It was repeated every half hour until about twelve o'clock, when she appeared to recover, and soon called for drink, and not only slept a little, but conversed some." "We had applied the East India Medicine twice before Mr. Jennison came; it had not been used more than two or three hours and a half, after the first thorough application was made, before she called for a drink, which she had not done for several days, and seemed considerably relieved. She asked for buttermilk; it was given her—at first a spoonful at a time. She said she could drink a pail full—I gave her the pitcher—she drank the contents, holding nearly a quart. It was about two o'clock when Mr. Jennison left—she was then asleep. About day-light she had a slight return of the spasms, with delirium, which was immediately subdued on the first application of the East India Medicine."

The preceding are the chief facts as detailed by the sister of Ann, in a deposition before a magistrate. What was the disease of this young woman? What was the nature and composition of the remedy used? How did it, provided it did, operate—by absorption or by sympathy? We profess ourselves unable to answer these questions, or to pretend to guide the faith of our readers in this matter. Perhaps we may be favored with fuller details of the case from one of the medical gentlemen in attendance.*

Attached Twins.—The following case is related in one of the French political papers, the Journal des Debats, in a letter from Rambouillet:

"On the 7th of October, a woman of the commune of Prunay-sous-Ables was brought to bed of twin daughters, but so united as to have the appearance of one body with two heads, four legs, and four arms. Two vertebral columns are perfectly distinguishable, and there are two chests and throats, with the organs of deglutition. There are also distinct organs of evacuation for each, and consequently it is inferred that the whole of the internal economy is double; but there was only one umbilical cord. This phenomenon is yet too young for any extensive or accurate observations to be made, but it is clear that the faculties of the two united beings are distinct, as one is frequently engaged in taking nourishment while the other is asleep. The heads are reversed, so that should one be placed on its feet, the head of the other would be hanging downwards with the feet in the air. The length of the two children is twenty inches. The arterial pulsations are isochronic in general, but those of one are a little more frequent than in the other. They have been baptized separately by the name of Marie Louise and Hortense Honorée. Their mother is a healthy woman, and was brought to bed last year of a child perfectly formed."—Eclectic Journal.

Certain signs of Worms.—In a letter from Dr. G. K. Holloway, dated 6th March, 1839, he declares himself unable to come to the conclusion that there is no positive symptom of the presence of worms in the alimentary canal; because, in a pretty extensive practice for nearly twenty years, he has "found one sign certain and positively true, as found in every case in which he has pretended to give positive opinion. The sign is " a spotted or indentated appearance of the tongue resembling the top of a pepper castor, with a peculiar color,

* We have learned, since, that Mr. Jennison's remedy caused vesication of the parts rubbed.
neither white, as that which is observed in common remittent fever of the country; but to a nice observer, it exhibits an inflammatory blush, in color more nearly approaching the pink than the rose." When Dr. H. sees such a state of the tongue concentrated with the other general symptoms and signs of worms, he has no hesitation in coming at once to the conclusion that the case is one of worms; and is happy to state that his conclusion, thus arrived at, is generally correct.

Dr. H. does not wish, however, to be understood that this is the only sign by which worms may be certainly known to exist in the prime of life. As another very certain sign of worms, he gives "the smooth, glossy, brownish state of the tongue in leuco-phlegmatic children who have a fœtid breath, and who are generally gluttons; and who generally call the attention of the parents to the actual state of their situation by having what are vulgarly called worm fits."

In support of the two evidences of worms above named, Dr. H. calls our attention to the three following cases, which made a lasting impression on his mind.

Case I.—This was a negro boy, 6 years old, much addicted to dirt-eating, with a pale, leucophasmatic, (!), ashy, harsh skin, haggard countenance, emaciated, inferior extremities somewhat enlarged, abdomen considerably swollen, upper lip tumid, and pupils dilated. When called, we found him in strong convulsions, and on examining the abdomen, hard round tumors were distinctly perceptible in the intestines. Ordered the warm bath, and gave an enema of oil and compound tinct. of castor, which brought away a considerable quantity of hard, clay-colored scibilistic matter. So soon as we could get to see his tongue, we positively pronounced it a case of worms, although laughed at for our opinion by a professional brother. Ordered 20 grains of calomel, and 2 of gambouge, and the continuance of the warm bath. So soon as this medicine operated, we gave the China root tea and castor oil; and before sunset, he passed upwards of 337 large lumbrici. The tongue in this case was as a pepper-caster top, fully indulated.

Case II.—This was a boy about 11 years old, who labored under, apparently, intermittent fever of the common grade. The tongue, in this case, was somewhat of a pale, brownish, slimy appearance. No particular symptoms or signs of worms, except sudden jerking of the extremities and spasmodic affections of the intestines resembling colic. He was obstinately costive. We proceeded to treat this case with calomel and opium, which, contrary to our expectation, caused the whole alveola process of the lower jaw to slough off.* But, eventu-

* It is a great virtue in the profession of medicine freely to acknowledge the unfortunate results of prescriptions, either from their injurious operations,
ally, about 48 or 50 large worms were discharged, one of which was a tricocephalus—after which the child had a speedy recovery.

**Case III.**—This was a young lady, of a cold phlegmatic temperament, who consulted us on account of dyspeptic symptoms; and the symptoms were certainly strongly indicative of such a disease. They were, disinclination to food, some eructations, pain in the region of the stomach, palpitation and fluttering of the heart, nervous irritability, interruption of the catamenia, and cold extremities with occasional exacerbation of fever.

From the general history of her previous life and the present symptoms, for she was a girl of excellent sense, we were led to look on the case as one of worms. The tongue was of a *very pale pink*, and the spots on it resembling the top of a pepper castor. We were now, in our mind, most positively confident that the great difficulty in the case, was worms; but not wishing to incur the displeasure of a beautiful young lady by saying that she was wormy, we pursued a very effeminate course for a few days, at the end of which we were called on most peremptorily, by the aforesaid beautiful young lady, for an opinion, as to the true nature of her case. We endeavored to parry the question, as one of no moment; but this, apparently, only increased the desire of the fair one to know the true character of her disease. But after a while, and under the most solemn and honorable assurance that no exceptions would be taken to our opinion, we *delicately hinted* that it might *possibly* be a case of worms, although *perfectly positive* in our opinion. But no

or their inefficiency, as others are thereby timely guarded against the same misfortunes. But we venture the decided opinion that in this case Dr. H. has exceeded the fact. Both books and general opinion, as well as prejudice against calomel have taught us to believe that such affections of the mouth, as is here alluded to, are the effects of mercury—its fatal, ruinous effects. They have been called "dry salivation." But facts of observation in this climate have taught us very differently. The truth is, that there is no one evidence of mercurial action in such cases. They occur without the use of mercury in any form, and are very uniformly curable by a judicious and timely use of calomel. Our practice for the last 18 years fully justifies these conclusions. Such cases have, more than all others together, been used to injure the character of calomel, and to deprive a suffering community of its benefits. These accidents are a gangrenopotic state, produced by other cause—chiefly a highly impure state of the blood from faulty hepatic action, and intestinal irritation from worms or other causes. The same state of the blood often produces, in this climate, a tendency to gangrene in other parts, as blisters, bad sores, &c. The fever in which there is this tendency is peculiar, and the disposition should be marked, and attended to before there is fatal destruction of parts. The motto "*omnia ex sanguine*" should not be lost sight of. Ultra-solidism passing away—a long and earnestly desired event, we may now hope for a salutary direction of attention to the state of the fluids which have for the last 30 or 40 years, been so much neglected. We refer the reader to an essay of Dr. E. A. Eve, in a former volume of this journal for some good observations on this disease. 

*Editor.*
sooner had we let the cat out of the bag, than we had a volley of abuse, like Etna, Vesuvius, and Strombolo, thrown at us for saying that the pretty Miss was wormy. Now, however, the issue was fairly joined, and she had, nolens volens, to submit to our judgment and treatment, or depart as she had come. Preferring the former, after a few days sulking, she agreed to take such medicines as I might prescribe; on doing which, there came away upwards of 300 counted ascarides, besides some which were apparently wound up into a ball."

Since the discussion of this subject in the Medical Society of Augusta, we have been informed by an experienced and intelligent mother, that she has been always able to detect the presence of worms in children by inspecting their nostrils. She states that in this disease, they exhibit, within, an unusual redness, or somewhat irritated appearance. Our own observation has not been extended to this fact; but it may be well for it to be noticed by practitioners; and if possible to distinguish, the difference between the appearance of this part under irritation from worms in particular: for we have often remarked that itching of the nose may arise from different kinds of irritation in the first passages, and that this itching leads to the picking of the nose—a symptom so often referred to as evincing the presence of worms.

Strumous Ophthalmia.—We have been not a little perplexed with this form of scrofulous affection, as indeed with all other forms of it. But in this, more than others, we have recently arrived at satisfactory results, after the ineffectual use of the whole routine of other remedies for ophthalmia without any success, (except in a partial degree under the use of issues,) by placing our reliance on the external use of iodine. The form in which we have used it was as follows:—

Dissolve Iodine

Hydriodate of Potass

Water

This has been increased in strength, in the progress of some of the cases, one hundred per cent.

This iodine eye-lotion was used by dropping it into the eye; and in severe and obstinate cases, applying pledgets of lint saturated with it, at bed-time.

Lugol’s iodine eye-lotion, the formula for which we have since seen,* is more conveniently prepared, and perhaps capable of longer preservation, and would, without doubt, prove equally beneficial.

Take 30 drops of Tincture of Iodine, 36 drops of Laudanum, and 3 iv. of distilled water.—Mix.

It should be borne in mind that starch and vegetable preparations containing it, are incompatibles—therefore the external application is effected by the medium of lint, and not of poultices of any farinaceous substance.

Injection of Galls.—It has been a matter of much difficulty to find a convenient and effectual lotion or injection for use in cases of prolapsus uteri, prolapsus ani, piles, and leucorrhœa. The solution of alum in water in common use has proved too ephemeral in its effect, the Port wine recommended by Dr. Good has too much abounded in stimulating, and proved deficient of styptic powers, whilst the decoction of oak bark has been extremely inconvenient on account of its staining quality. We have adopted, for use, in cases of prolapsus uteri, a decoction of galls made by boiling 3 j. of bruised galls in 3 xx of water, down to 16. Dr. Copeland recommends the decoction of galls, made by taking 5 ss of bruised galls, 0 ii. of water, boiling down to 0 ij.—strain and add 3 j. tincture of galls for prolapsus ani, piles, and leucorrhœa.

The tincture of galls (tinctura gallarum of the Edinburgh, Dublin, and Paris, pharmacopœias) is made by adding 5 ij. powdered galls to 5 xxv. of proof spirit, and making a tincture.

An injection of galls for gleet and gonorrhœa is also made by mixing 3 ij. each of decoction of galls and distilled water.

Doses.—Much of the uncertainty attending the use of medicines is owing, not so much to the imperfect nature of the medicine, as the want of attention to, and due discrimination of, the various particulars of the case in which it is prescribed. To some of these points the attention of the practitioner is called on the XXIII page of the introduction of the new supplement to the pharmacopœias of London, Edinburg, Dublin, and Paris; from which we take the following judicious precepts:—

"In prescribing a medicine, the following circumstances should always be kept in view: Age, Sex, Temperament, Habit, Climate, State of the Stomach, and Idiosyncracy," to which we would add, the period of the disease.

Age.—For an adult, suppose the dose to be one, or 1 drachm.

Under 1 year old, will require 1-12 or 5 grains.

2 " " " 1-8 or 8 "
3 " " " 1-6 or 10 "
4 " " " 1-4 or 15 "
7 " " " 1-3 or 1 scruple.
14 " " " 1-2 or half a drachm.
20 " " " 2-3 or 2 scruples.
About 21 the full dose. one or 1 drachm.
65 the inverse gradation of the above."
We have found no necessity for varying the dose above the close of the second septenniad, or 14 years, until we arrive at the inverse gradation demanded by old age.

"Sex.—Women require smaller doses than men, and the state of the uterine system must never be overlooked." This is a very important precept.

Temperament.—Stimulants and purgatives more readily affect the sanguine than the phlegmatic, and consequently, the former require smaller doses.

Habits.—The knowledge of these is essential; for those in the habitual use of stimulants and narcotics require large doses to affect them, when laboring under disease; whilst those who have habituated themselves to the use of saline purgatives are more easily affected by these remedies.

Climate.—Medicines act differently on the same individual, in summer and in winter; and in different climates." This is particularly observable in the use of calomel.

"State of Stomach, and Idiosyncracy. The least active medicines operate very violently on some individuals, owing to a peculiarity of stomach, or rather, disposition of body, unconnected with temperament. This state can be discovered only by accident or time; but when it is known, it should always be attended to by the practitioner.

In prescribing, the practitioner should always so regulate the intervals between the doses, that the next dose may be taken before the effect of the former is altogether effaced; for by not attending to this circumstance, the cure is always commencing, but never proceeding. It should, however, also be kept in mind that medicines, such as mercurial salts, arsenic, are apt to accumulate in the system, and danger may thence arise if the doses too rapidly succeed to each other. The action also of some remedies, elaterium and digitalis, for example, continues long after the remedy is left off; and therefore much caution is requisite in avoiding too powerful an effect, by a repetition of these even in diminished doses.—Dr. A. T. Thomas.
MEDICAL INTELLIGENCE.

MEDICAL COLLEGE OF GEORGIA.—The exercises in this institution closed, for the present season, on Saturday, the 2d March last; and the annual commencement was held on the Saturday following, when the degree of Doctor of Medicine was conferred by the Vice President on the following gentlemen, each of whom was, upon examination, unanimously presented to the Board as worthy of this honor.

Ransom Linch, Thesis on Pleuritis,

George F. Taylor，“Indigestion,

Wm. M. Burt,“Congestive Fever,*

Augustus A. Cullens,“Acute Gastritis,

Jno. T. Sims,“Delirium Tremens,

Thos. K. Dunham,“Phthisis Pulmonalis,

Henry H. Meals,“Bilious Colic,

Thos. E. Bowdre,“The Organs of Digestion,

Edward W. Alfriend,“Menstruation,

Henry P. Turner,“The Physiology of the Liver,

George E. Smyth,“Physiology of the Mind,

Johannon McLester,“The Liver and Bile.

After the degrees were conferred, an address was delivered to the graduates by Dr. A Cunningham, a member of the Board of Trustees, in which the graduates were counselled to regard themselves as having but entered upon the study of their profession. In illustration of the correctness of this sentiment he sketched the many and extensive studies which have a claim on him who is honored with the appellation of a learned man; and concluded with just and appropriate remarks on the duties of physicians to each other, and to society.

A very complimentary communication from the students to the faculty at the close of the session, testifies that the course of lectures just ended, was, in every respect, highly satisfactory to the class; also that the anatomical accommodations were abundant—each dissecting class having had no less than three subjects. Indeed, such are the ample and effectual arrangements made by this institution, that the opportunities it affords for practical anatony are no longer to be doubted. The class, for the last season, amounted to 60; an increase of about fifty present on that of the previous season; which affords to the friends of the institution the most cheering prospect of its good success.

* This thesis, being on a subject of deep interest at the present time, is inserted in the 1 Part of this No. of the Southern Medical and Surgical Journal.
We are pleased to state that, during the last winter the College received a large accession to its library, consisting of an importation of the most valuable new, and rare old works from Europe. Its chemical department was also greatly enriched by the accession of many rare and valuable apparatus, constructed in Philadelphia during the last summer, under the immediate supervision of Professor Davis, the present very able incumbent of that department.

It is but justice, both to the graduates and to the faculty to state, that the approvals as well as the disapprovals, at the late examination were, in every instance, unanimous. Twelve candidates for graduation were successful. We are pleased to see the high standard of talent exacted in this institution to entitle the candidate to its honors. It promises well for the good of humanity, for that of the profession at the south, and for the sure and permanent prosperity of the College.

It is but justice to the whole class to state that their good order and genteel deportment has probably never been surpassed by the same number of young gentlemen of any class assembled together in such close relation, and for so long a space of time. We hope the excellent example will be imitated by others; and that young gentlemen will begin with their collegiate course, when they have not done so before, to establish that character which properly belongs to the profession they adopt, and which is so indispensable to their successful career.

Correction.—For Scutillaria, in the 15th line from the bottom of the 375 page, contained in the last No., read Scutulata.