met with a case where the primary treatment was not plainly indicated by the disordered digestion, the loaded bowels, the pain or heat of the head and the languid circulation of the skin. But it is also right to state, that where these symptoms have been properly treated, the involuntary muscular movements, have often continued unchanged, until after the employment of the Black Snake Root. Purging we have always used before the emicifuga, and general frictions with salt or the flesh-brush, and pustulation with Croton oil over the spine, we have believed to be of much value in the chronic cases. Of the two preparations we have employed, we are disposed to give the powdered root the preference, and now regret that we did not administer large doses in that form in our fifth case, where the decoction certainly had no effect.

Of the cases noted in this paper, it will be observed five were girls and two boys; and of the girls only one had attained an age where deranged menstruation was supposed likely to have had any agency in the production of the disease.

In what manner the emicifuga produces its peculiar physiological effects we have not yet been able satisfactorily to determine. In the largest dose in which we have ever given it, it has produced no perceptible excitement of the pulse, no pain or heat in the head; and in only two of the cases, trifling nausea. The bowels have generally been moderately open during the use of the remedy, which has appeared mildly laxative, without ever inducing decided purgation.

Philadelphia, November, 1839.

ART. III.—*On the Nitro-muriatic Mixture as a Remedial agent.* By
JOHN P. METTAUER, M. D., of Virginia.

The compound which forms the subject of this communication, although early employed, and highly extolled, as a therapeutic agent, by distinguished European physicians, has been in a great degree disregarded in this country. The commendations bestowed upon it by Dr. Scott, in his essay, read before the Medical and Chirurgical Society of London, March 4th, 1817, as well as the very favourable opinions expressed of its value, by Doctor James Johnson, Mr. Annesley and others, certainly entitled this compound to be more generally resorted to, by the profession, as a remedial agent. Having frequently employed it, during the last fourteen years, and, with distinguished success, in a great variety of diseases, it has occurred to us that a transcript of our experience, in conjunction with a few of the most conspicuous cases in which it was used, presented in detail, might not be unacceptable to our brethren; and would tend to awaken, in some degree, a spirit of investigation.

Our attention was first directed to the nitro-muriatic mixture, as a remedial agent, by the perusal of Doctor Scott's essay, already referred to, and by attentively reflecting on the cases treated with it by him, as well as upon the chemical properties of the mixture, we determined to give it a trial in the first case which should occur propitious to its use. Accordingly in a short time the following case was committed to our care, in which we used it.

Mr. * * *, ætat. 29, of slender person, and strongly marked lymphatic developments, had been subject for fourteen years to asthmatic attacks from the slightest exposure: indeed the constant cough and free expectoration, with more emaciation than usually attends upon asthma in ordinary cases, had induced his friends, and early medical advisers, to regard the case as tubercular phthisis of a slowly wasting character. During the protracted ill health of this young man, anorexia, indigestion, constipation of the most obstinate kind, low spirits, &c., were constant attendants. The constipation was so obstinate, and constant as to resist the action of the most powerful and certain of the ordinary cathartic remedies in a very great degree; and its long continuance had so impaired, or vitiated the secretions, as to impart to some of them a peculiar fætor, especially the exhalations from the pulmonary mucous surface, the urine, and perspiration. The gentleman's mind suffered much also, and occasionally became so erratic in its operations, as to expose him to the sarcasm and merry jeerings, not to say cruel ridicule of the thoughtless and unfeeling. In regard to his disease he seemed on some occasions irrational and almost a mono-maniac.

A critical examination into the case, disclosed, as a part of its early history, excessive indulgence in the soul-debasing practice of onanism, by the young man; and to the pernicious effects resulting to his delicate constitution from it, we ascribed some of the unpleasant and untoward symptoms now present. It could not be perceived during any of our visits to this gentleman, that he laboured under fever of marked character: and from his own testimony, and that of his friends, we were forced to the conclusion, that there was an absence of it, though we believe something like febricula must attend upon the case.

Before this case passed into our hands it had been treated by a variety of modes of practice, without affording the gentleman the least relief. Purgatives had been freely employed, but they failed to ameliorate the condition of the bowels, or any of the other symptoms of the case. Notwithstanding such had been the unfortunate result of purgative remedies, we determined to give them a trial ourselves, hoping by some combination, that we might be so fortunate as to meet the indication now present. We employed almost every variety of cathartic, again and again, combining them in various ways, repeating them after intervals more or less lengthened, but without being able to effect any salutary change in the condition of our patient. The cathartics, generally, acted so imperfectly, as very soon after com-

mencing with them, almost to induce us to lay them aside. They were, however, faithfully tried by the patient, who, as some of the means employed were new to him, felt to the last, much reluctance in giving up the purgative plan.

In this state of the case, after five weeks trial with internal cathartics, it occurred to us to make an experiment with the nitro-muriatic mixture. We formed the mixture of equal parts of nitric and muriatic acids and water: of this, from six to twelve drops properly diluted with sugared water, were administered through a small canula of reed, to prevent its action upon the teeth, three times during the day, varying the doses, so as to give the largest at noon, and at night. At the same time from thirty to fifty drops, diluted in two or three times as much simple water, were applied with a sponge over the regions of the liver and epigastrium, and to the insides of the arms, and thighs, having previously washed away from the skin, with soap and water, its unctuous secretion, to enable the acid mixture more readily to penetrate. In this manner the remedy was continued for three days, before any decided impression was formed upon the constitution by it. About the close of the third day, some improvement of appetite, and of the buccal secretions was manifested. But on the morning of the fourth, to the surprise and gratification of our patient, the bowels acted freely, and seemed as he expressed it "just to have waked up from their long sleep." On this day we visited the gentleman, and found him greatly relieved, in body, as well as in mind. For two or three days, the remedy, although partially discontinued, acted rather too freely upon the bowels: after this time, however, they became more tranquil, and gradually acquired a state of solubility, of the most comfortable nature. It was found necessary in consequence of the deficiency of the biliary secretion, as manifested by the appearance of the alvine discharges, to continue the use of the acid mixture, both internally and externally for some days, after it had unlocked the bowels. It was one of the remarkable effects of the remedy in this case, and very soon after the constitution had become only partially impressed by its action, to improve the appetite and to enliven the spirits. The gentleman was now cheerful and full of hope, and able to indulge in the use of almost any kind of food, of which he partook freely, and with a good relish and keen appetite. His recovery from this time was progressive and rapid. No other remedy was ever used by this patient after commencing with the acid mixture: nor was it necessary to use that during convalescence, except when the bowels seemed to become less free, and the appetite to falter, or to decay. At the date of this communication, now more than ten years since the case was treated, the gentleman continues to enjoy excellent health, and as buoyant spirits as any person of our acquaintance, of a constitution naturally feeble and delicate.

The next case which we shall particularly detail is an example of puerperal mania.

The lady, who was the subject of this afflictive case, was about eighteen years of age, of a good constitution; and rather disposed to be fleshy. She had never until after her confinement, which preceded the attack of insanity, and which was her first, discovered the slightest disposition to mental derangement, although such an infirmity was strongly hereditary in her family. Nothing occurred during the labour, or after parturition, which could have superinduced the maniacal condition. Four weeks elapsed before any indications of disturbed health were perceived, and when discovered were so slight as with difficulty to be recognised as decidedly morbid in their nature. The earliest appreciable symptom of a departure from the ordinary healthy state peculiar to lying-in women, was costiveness in a slight degree. This state soon deteriorated considerably, and with its augmentation the lochial discharge perceptibly diminished. The condition now presented did not long continue before the secretion of milk became sensibly lessened, attended with impairment of the secretions generally, and some slight fever towards evening, which last was very soon followed by symptoms of alienation of mind, first observed at night, five weeks after parturition. We did not visit this lady in the early stage of the attack, being absent from the county at that time; but we learned on first seeing her, that the symptoms of derangement very gradually but progressively increased in violence, until complete alienation of mind followed. Without attempting a particular detail of the case in this stage we will observe, that we have never witnessed a more aggravated case of mental derangement.

Previous to our visit efforts to purge had been made, but they were rendered ineffectual by the lady's incorrigible unwillingness to use remedies. When we first saw this patient, seven weeks after the birth of her child, we found her as already intimated, perfectly deranged, with the bowels obstinately costive, which state of them had continued for more than ten days; the lochia dried up; the secretion of milk, and the secretions generally, greatly deficient in quantity; perfect insomnia, and very slight general fever. For many days in succession very little food or even drink had been taken by her, either from a want of appetite and thirst, or from the apprehension that if she ate or drank, medicine might be disguised in the food or drink.

In treating this case our first object was to obviate the continued costiveness, and we attempted to effect this end through the agency of active internal cathartic means. We found so great difficulty in the administration of these, from the resistance of the lady, that we only succeeded after ten days trial, in introducing into the stomach one efficient cathartic dose; it being now manifestly impossible to introduce cathartics into the stomach, and it was equally impracticable to employ cathartic means by enema. In this state of the case we were compelled to draw upon our inventive resources; and while anxiously reflecting on the difficulties now so well calculated to embarrass and perplex us, the nitro-muriatic mixture presented itself to our mind as more likely to aid than any other means, now available

to us, to overcome the constipation of the bowels. The remedy was speedily prepared and extensively applied, by spooging every accessible region of the extended dermoid texture three and four times daily. In this case the mixture already advised for external use was employed for three days before it seemed to make any impression upon the internal organs. During the night of the third day, however, after commencing with the sponging, the bowels gave way, and a most profuse catharsis followed, attended with dark, tar-like evacuations, and exceedingly offensive. These evacuations were soon followed by others more natural in appearance; and now it was that the lady became more tranquil, and reposed in quiet and refreshing sleep the first time for many days and nights in succession. Her mind about this time, likewise, became more rational, especially after she had slept a few hours; and for the first time, for nearly four weeks, she inquired affectionately, and with parental tenderness, after her infant. The application of the acid mixture was in a measure suspended now; and, as the symptoms seemed to abate or to assume a healthy aspect, it was gradually laid aside. It was remarked that a single application of the remedy after the constitution was impressed by it, was sufficient to operate upon the bowels decidedly; and, that by varying the quantity used at each time, corresponding effects were produced upon the bowels. Under this simple treatment the lady soon recovered; and, at the date of this communication, now nearly seven years since the case was treated, and with the exception of a slight attack of melancholy, she has enjoyed excellent health, and is the mother of three fine healthy children.

We will report one other case in detail, confirmatory of the great value of the acid mixture in overcoming constipation, dependent upon biliary irregularity, especially that form of it connected with torpor of the liver. This was a case of stricture of the urethra, which in its early stage, had been badly treated with caustic. The gentleman down to the period of using the caustic—as he informed us when our advice was requested in the case—was healthy. The stricture followed gonorrhœa. When the case came under our notice, we found the patient's general health greatly impaired; the strictures augmented by the cicatriccs, resulting from the bad management of the caustic; the digestive organs greatly disordered, attended with the most obstinate constipation; some fever at night, and very considerable emaciation and general debility. This gentleman had from the first, experienced much difficulty in regulating the condition of his bowels; and in the efforts to relieve the constipation, a great variety of remedies had been employed ineffectually. In treating the case for constipation, it had had been observed by the patient himself, that when even a cathartic acted freely, the stricture, although permanent in its nature, was less troublesome.

Our first object was to correct the torpor, and general disorder of the digestive system, before an effort for the correction of the stricture was deemed advisable. Accordingly, we commenced with the usual remedies

in such cases, using occasional doses of mercurials, and a great variety of purgative means, alternating and combining them in almost every possible manner, without, however, affording our patient any more than the slightest temporary relief. At length becoming discouraged, in making further trials with the ordinary internal remedies, we determined to use the nitro-muriatic mixture, and, as in the preceding case, our confidence in the remedy was much strengthened by our experience with it in the early trials which we had made, already reported.

We commenced with it, both as an external application, and an internal remedy, diluted and employed as already intimated. In three days the constitution was decidedly impressed by it, the bowels especially, which now acted freely. After its continuance one or two days longer, the quantity to be used was diminished very gradually, to what was actually required to maintain the regularity of the bowels. We now incised the strictures, three in number, and one fully an inch in extent, and extremely firm, and the corresponding portion of the urethra a mere capillary tube, and had the satisfaction, after using a large gum catheter as a dilating means, for five weeks, to find our patient perfectly restored to health, and his wonted cheerfulness. The mixture in this case was continued occasionally for some time, both during the cure of the stricture, and after its complete removal. Indeed it was found so agreeable a remedy, and so effectual in regulating the appetite and bowels, that the gentleman has never ceased to employ it occasionally for such purposes, when judged necessary by him.

This patient, now six years since the remedy was first employed with him, has continued entirely healthy, and free from his two torments, constipation and stricture, down to the date of this communication.

Besides the cases here reported, we have in numerous others of similar character, employed the nitro-muriatic mixture, with effects equally as marked as a curative agent. In dyspepsia, hepaticula, and other forms of chronic derangement of the liver, uterine affections of a sub-inflammatory nature, some of the forms of external serofula, and nearly every variety of pseudo-syphilis, we have used this remedy with the happiest effects. In chronic uterine affections, especially the different forms of imperfect menstruation, connected with disturbance of the digestive function, and distinguished by mental depression, constipation, and anorexia, we have found it exceedingly beneficial. We have also employed the mixture with great advantage in certain forms of hepatic torpor and constipation, following catarrhal fever, with constitutions decidedly bilious. In some of these cases the curative effects of the remedy have most signally displayed themselves. This affection we have found quite common; and until we had recourse to the acid mixture in its treatment, it was an intractable and troublesome form of hepatic derangement.

From the prompt and decided action of this remedy upon the biliary secretions, when endermically applied in all the cases in which we have

used it, it presents itself as a valuable remedy in the treatment of that scourge, Asiatic cholera; and should we ever have an opportunity of treating a case of that appalling disease, it shall constitute one of our chief remedies. In this disease it may be used both as a certain and prompt promoter of the biliary, and general secretory operations; and as a powerful revellent, and counter-irritant, in aiding the eentrifugal tendencies to the skin, two of the most important therapeutie designs in treating cholera. It may also be beneficially employed in cases of irritability of the stomach demanding cathartics.

In the first case which has been detailed, we believe no other remedy would have arrested the course of the disease so promptly and effectually as the acid mixture: and from the numerous and satisfactory trials of other remedies unsuccessfully used, we are forced to the conclusion that no other agent possessed the therapeutie properties adapting a remedy to the cure of such a disease as this case must have been.

The case of puerperal mania furnishes evidencee equally satisfactory, in support of the therapeutie powers of the acid mixture, when employed as an epidermic remedy, as no other agent was used at the time, nor had been employed for more than ten days before it was resorted to. In this case we are disposed to believe, if the acid mixture had not been employed externally, that the disease would have terminated fatally, as it was next to impossibility to introduce efficient remedies in any other mode, and the patient was daily and rapidly declining, when it was commenced with, and must very soon have succumbed under the afflictive disease.

In the last case, particularly detailed, it will be conceded that this valuable remedy was equally efficient in arresting the tendency of the bowels to troublesome constipation, and in imparting to the digestive system a condition more favourable for a healthful exercise of its functions.

We believe the acid mixture is especially adapted to the treatment of morbid states of the human body, based in ehronic inflammation, or engorgements of the capillary and parenchymatous structures of an indolent nature, either as the primary pathological condition of these structures, or the consequence of inflammation. In this view it is assimilated in its remedial action to mereury, to which agent we believe it bears a very striking resemblance in many of its therapeutie powers, especially those from which a deobstruent operation may be supposed to result. In the cases which have been detailed, as well as the diseases referred to, in which the remedy has been found decidedly beneficial, one or the other of these conditions must have obtained in the organs chiefly affected, or the pathological state from which the funetional disturbances followed, constituting the external morbid phenomena of the disease present; the almost entire absence of constitutional fever, and the ordinary concomitants of a state of active phlogosis, in the diseases treated by us, as well as the cases reported in this communication, in which the acid mixture was chiefly beneficial, render it strongly pre-

sumable, that such was the character of their pathological basis in the structure at the time the remedy was employed.

In diseases of decided inflammatory character, the acid mixture is entirely inapplicable; and, as far as our experience enables us to decide, becomes so by reason of its tendency to irritate the constitution through those qualities which directly exalt the action of the economy unduly, so as to superinduce a state of hypersthenia. We have never found any but injurious effects to follow its action in every form of acute disease in which we have employed the remedy, and for a number of years have confined its use exclusively to chronic affections with very slight febrile disturbance of the general system.

Whether employed internally or externally, the remedial effects of the acid mixture are the same. Occasionally it acts with undue violence on the liver and bowels producing hypercatharsis, or even a condition may follow closely verging on dysentery, as it sometimes elicits sanguineous dejections, attended with tenesmus of most painful character. But, generally, its action is moderate and equable, and the remote textures, especially those forming the capillary and parenchymatous structures, as they constitute the glandular and other secreting organs, are chiefly obnoxious to its operation. Upon the glandular system, as well as the extended secreting mucous and serous surfaces, it acts with peculiar effect as a promoter of secretion and absorption. It is very certain that this mixture increases the salival flow; but its action as a sialagogue differs from that of mercury in not producing tumefaction of the gums, but only slight tenderness of them, beyond which it can seldom be increased. The breath is never contaminated by it, unless the acid is permitted to act on the teeth; and to prevent this accident, it should always be imbibed through a tube of some indestructible material introduced fairly into the fauces.

From the experiments of Dr. Scott, and others, as well as from our individual experiments with the nitro-muriatic mixture, and a solution of chlorine in water, we are disposed to refer the action of the compound in every case to the presence of chlorine, and believe, with Dr. Scott, that a solution of this elementary substance in water will answer as well as the nitro-muriatic mixture as a remedial agent.

We have never employed the remedy as a bath by immersion, chiefly on account of the difficulty of using it in this form in a country practice. In applying it as an epidermic remedy and by sponging, the mixture should not be used of painful strength, and from twenty to thirty minutes time will be long enough to continue the sponging at each application of the remedy, taking care that the surface shall be constantly kept moist, and covered to prevent the too sudden evaporation of the mixture from it. Should the parts become irritated, so far as to render the reapplication of the mixture to them painful, other situations must be selected. Unless employed as a counter-irritant purposely, the remedy should never irritate the skin in a painful degree; nor will it enhance the curative operation of the mixture, when

employed as a constitutional remedy, to use it of a strength sufficient to vesicate or pimple decidedly. The regions of the liver and stomach, the spine, and the inside of the arms, thighs and legs, are the parts of the body to which we have generally applied the remedy. When to be used to the upper and lower extremities at the same time, we have imitated the custom of having it applied only to one extremity of the opposite sides; that is, to the right arm and the left leg; and, conversely, to the left arm and to the right leg, unless the case be urgent, such as the puerperal mania already reported.

In every case the pulse should be carefully attended to before this remedy is employed; and by no means should this important index of the state of the general system be disregarded during its continuance, or a condition essentially inflammatory may supervene upon its use, to contra-indicate a farther continuance of the mixture. We have never employed the remedy in question with children, and incline to believe that it will not suit their delicate and irritable constitution, especially as an epidermic application.

In conclusion, we would earnestly invite the attention of our medical brethren to this neglected but valuable remedial agent; and we really believe, if they would more generally employ it, there would be less necessity for the use of mercurial preparations, against which, in every condition of society, an abiding prejudice obtains.

Prince Edward Court House, Va., October 26, 1839.

ART. IV.—*Cases of Lupus, (Dartre Rongeante of Alibert.)* By J. W. SCHMIDT, Jun., M. D., one of the Physicians to the New York Infirmary for Diseases of the Skin.

LUPUS makes its attack and ravages on every part of the body, but most commonly on the face, destroying the nose, eyelids and lips in its progress. It is attended with a hypertrophied and engorged condition of the tissues, and has the effect of puckering the skin to a remarkable degree, when the scabs have dropped off, and left a cicatrix, so that as it advances, the nostrils are often stopped up and drawn aside, and the lower lid stretched down, resembling in a measure, the effects of a very bad burn, and presenting the poor sufferer a frightful and disgusting object. It is mostly regarded as occurring in strumous constitutions, and in persons of that habit, who have suffered from syphilis and have a taint left of that disease; but occasionally it is met with of purely serofulous origio, of which I have a lady at the present time under my care. It is placed by Alibert, Rayer and Gibert among the order *Tuberculæ*, but Cazenave has placed it with Bielt, separately as not belonging to any of the recognized orders. It commences with