Medical reflections, with two cases of Spinal Irritation, Simulating Colic and Gastro-Enteritis. By J. W. Heustis, M. D. of Mobile.

The enterprising and indefatigable researches of the physiologists and pathologists of the present day, and we may say of the medical profession generally, have greatly extended the scope of observation and inquiry, and produced more enlightened views in relation to the functions, diseases, and influences of the nervous system in all its phenomena, bearings and relations, as well in health as disease, than were ever anticipated in the days of Cullen and Brown. This is as it should be. No physician, who properly estimates the exalted dignity and responsibility of his profession, can consider any labor and assiduity too devoted, that have for their object the alleviation of the amount of human suffering, of mitigating the pangs of disease, and of contributing to the restoration and health of the afflicted. An office so benevolent and god-like, when undertaken with the true spirit, confers a dignity upon human nature, and gives a character of respect and veneration to the enlightened and successful practitioner, alike calling forth the admiration and esteem of the civilized and barbarian. And what feelings can be more congenial to the heart than those produced by the overflowings of grati-
tude, greeting the physician wherever he goes, as the messenger of comfort and the disposer of blessings—to possess such a hold upon the confidence of the sufferer, relatives and friends, that the very appearance of the familiar and cherished countenance of the physician, lights up the beams of hope upon the visage of anxiety, suffering and despair? True, we sometimes meet with unmerited and ungenerous treatment and mortifications, from the sickness and caprice of those who should have considered themselves under permanent obligations. Cases of this kind, however, are so common, that they should cease to leave any permanent impression on the mind of the more experienced, satisfied in himself in relation to the correctness and propriety of his conduct. The payment of an account is generally considered the liquidation of all obligations: with respect to the medical profession, however, such an idea is illiberal and unjust. It is rare with us that the fees are larger than are necessary to cover the expenses; so that without other resources, the physician must be content to drudge on through years of penury, well satisfied, if in the decline of life he is placed beyond the reach of want and apprehension. And is such a perquisite a full equivalent for all assiduity, solicitude and care? Is it thus that our services are considered in the light of mere mechanical or mercantile employments? To a sentiment so unworthy, it has been my good fortune to know many and honorable exceptions—exceptions, affording a satisfaction more pure and genuine, than any that could be yielded by mere pecuniary reward and compensation. With these remarks, I enter upon the more immediate subject of consideration.

The connexion of rheumatism and various painful affections, with existing irritation in the spinal origin of the nerves of sensation and volition, has shed a new light upon the former disease, promising to be of essential practical utility, as well in this as in other affections which it may resemble in character and symptoms. As serving to elucidate this subject, I submit the two following cases, much abridged and condensed.

Case 1. I was called, Sunday, July 10, to see Mrs. W.—During my absence, Dr. B. had been called in, and had bled her. As I, however, was the attending physician in the family, the case came more exclusively under my care. The attack had very much the appearance of a violent colic, viz. excruciating
pain in the bowels or abdomen, and a strong spasmodic undulating heaving of the thorax and abdomen at every inspiration, by which the latter was thrown convulsively and violently forwards. These symptoms were relieved by bleeding and the subsequent free use of laudanum and other antispasmodics. There were still, however, great soreness and tenderness of the abdomen on pressure, for which the lancet was used twice, besides the free bleeding at the commencement of the disease; the warm bath was also used, and also warm fomentations. On the third day of the disease, to open the bowels, a moderate dose of castor-oil was exhibited; as this operated too freely, an opium pill was given. From this time she was seized with convulsions, which would frequently recur at irregular intervals, perhaps as often as eight or ten times in the course of the day. At night she was generally composed, and rested well with the aid of an anodyne, given either by the mouth or injection. She also took infusion of valerian, as there was little or no excitement. Pills composed of the blue mass, calomel and camphor, were also exhibited.—As she complained much of her head, this was repeatedly cupped and blistered, as was also the region of the stomach. As there was tenderness about the lower portion of the dorsal vertebrae, a cup was applied to this portion of the spine, and subsequently, a blister.

July 16. The blister drew well, but notwithstanding this, and the various other means, she has had several severe convulsions, and now lies in a state of stupor.

July 17. Had the cuticle removed from the blistered part, and the surface dressed with cerate, containing about one grain of the acetate of morphia: took an anodyne injection last evening, and has been taking to-day, every two hours, about the sixth of a grain of the acetate of morphia, and two grains of the blue pill: took also, this evening, an anodyne enema, as there were symptoms indicating the return of spasms. The opiates have produced nausea and some vomiting; let them be discontinued: has had no return of spasms since the evening of the 16th.

The pains, spasms and convulsions now, became much mitigated, and their return protracted to longer intervals. Great relief appeared to be afforded by dressing the blistered surface, with simple cerate, containing about half a grain or more of the acetate of morphia to each dressing. As there were pretty dis-
tinct intimations given of the threatened attack of convulsions, by the appearance and sensations of the patient, these were prevented by enemata of starch, containing two or three drachms of laudanum. Under this treatment she soon recovered.

The first decided impression was made by the blisters and the application of morphine to the denuded surface. The anodyne injections were also of essential benefit. It is worthy of remark, that the cupping of the temples, and all the applications that were made to the head were entirely unavailing, clearly showing that this was only sympathetically affected.

From all the circumstances connected with this case, I was convinced that its seat was in the spinal origin of the nerves of the lumbar vertebrae, or in the cord itself; and with this view the treatment was finally directed. And it is proper to mention, that previously to each attack of convulsions, she would be seized with intense pain in the spine, sympathetically affecting the head at the same time.

**Case 2.** Mrs. D. had been confined to her bed a number of days, with what was called a bilious colic, and for which she had been treated accordingly, by her attending physician. As her case continued without improvement, and the symptoms became alarming, it was deemed expedient to hold a consultation. She complained of severe abdominal pains, subject to frequent exacerbations, for which her only relief was in the free use of morphia. As there were some symptoms resembling those of the case above related, I suspected an affection of the lumbar or dorsal nerves, or of the cord from which they originate. Upon pressing upon the spinous processes along the four or five lower dorsal vertebrae, and the upper portion of the lumbar, she shrunk from the touch, making great complaint of the tenderness and pain therefrom: and, indeed, she referred the origin of her abdominal pains to the spine, radiating from thence as a common centre. I suggested to her physician, the propriety of exciting counter-irritation of the spine, by blisters or tartar emetic. He, however, appeared rather to take a different view of the case, considering it as chronic enteritis, originating from an attack of bilious colic; and so we compromised, directing the warm bath occasionally, morphia to allay the pain, enemata to keep the bowels free, and food of the mildest and least irritating kind, as arrow root, crackers and tea, dry toast and things of that description.
She was already in a state of salivation, and the cheeks and fauces were considerably ulcerated. In nearly the same situation she remained several days, under similar treatment, occasionally a little better and then worse, without any permanent improvement. The pulse was rather full and strong for a person in her debilitated state, although she had been bled the day previous. As the case belonged more exclusively to the former physician who had previously attended her, I saw her but seldom. On the 18th of August, I was particularly requested to visit her again; there was but little alteration; she was still confined to her bed. She complained of great tenderness and soreness of the abdomen, along the tract of the colon, for which I cupped her, but without any permanent relief, as she was attacked the next day with pain and spasm as violent as ever. Agreeably to my original idea, I now applied a pitch-plaster, strongly impregnated with tartar emetic, to the affected portion of the spine. She still found it necessary to use the morphine. Her former physician saw her, in company with me, and from his representation of the previous good effects of mercury and salivation in her case, she was put upon the use of the blue-pill night and morning. On the 23rd of August, four days from the application of the plaster, I found her sitting up for the first time, attending to some light domestic employments, quite cheerful, saying that she was getting well—that she could now put her feet to the floor without that dreadful pricking and stinging sensation that she before experienced in her feet when attempting that movement. Upon enquiring whether the plaster had produced any uneasiness of the back, she said it had, and that it was very sore and raw, but that she did not regard that if it would only assist her recovery. Her former physician had, a day or two previously, suggested the propriety of putting her upon the use of the blue-pill, with ipecac and opium, every two hours. She wished to know of me whether the object was to produce salivation, I replied that was, in part, the design; she thereupon strongly protested against the prescription, and against the use of mercury in any quantity or form, having already, as she said, suffered so much from salivation. The prescription was not insisted on, and her rapid convalescence rendered it unnecessary.

I consider the tartar emetic plaster, as the sole efficient agent in the relief of this case.
The probability is, that were cases of supposed colic and enteritis more closely analyzed, they would frequently be found to proceed from spinal irritation; and, indeed, so important is the relation which the medulla spinalis bears to the general system, that in all painful, spasmodic and convulsive affections, its examination should never be neglected.

Mobile, August 31, 1836.

ARTICLE II.

An account of Cholera, as it prevailed in the City of Savannah and its vicinity, in the Fall of 1834. By P. M. Kollock, M. D., of Savannah, Georgia.

Since the subject of Cholera began, more particularly, to attract the attention of European and American physicians, its history, pathology, treatment, and in fine, every circumstance relating to the disease, as presented to the observation of those who have witnessed it, have been so minutely and voluminously discussed, that it might appear rather supererogatory and perhaps presumptuous, to attempt at this time to present any thing which could be considered original, or at all interesting in regard to it. But, however minute have been the descriptions, and however voluminous the essays on the subject, every man of judgment and candour, every one interested in the establishment of truth, and in the advancement of science, is compelled to ask himself the question—How much good have they done? how much have they contributed towards the establishment of the pathology of the disease, and more particularly of its treatment?

In considering the first part of this query, the philanthropic physician has much cause of triumph and rejoicing. The scalpel of the pathological anatomist, particularly of our own country, has revealed to us most satisfactorily, the condition of the
organs, which is the result of the operation of this most mysterious agent—and taught us that cholera is not to be considered a disease of extreme debility, in any of its stages, and demanding for its cure the administration of the most powerful stimulants known to us; but rather that it is to be classed with those diseases which exhibit the phenomena of the most intense phlogosis.

Far less reason, however, has the profession to exult in their success, in having established a sure and uniform course of treatment, deduced from a pathology, which seems so clearly and satisfactorily ascertained. Notwithstanding the apparent certainty which exists in regard to this point, the treatment of the disease in general is as fluctuating and unscientific as can well be conceived; and consequently its success is proportional. On this account, when it makes its appearance, practitioners, as well as patients, are panic-stricken—their unsettled notions lead to failure in practice—the community lose confidence, and are ready and anxious to plunge into the vast ocean of empiricism.

Having had cause to feel most forcibly the truth of the above remarks, I have been induced to offer the following paper to the notice of the profession in this section of country, not with the hope of presenting, in any strikingly original point of view, a subject, about which so much has already been written, or of adding anything important to the mass of information on the subject. But believing that the disease on its irruption at this place, exhibited features differing in some respects from what were observed in other parts of the country, particularly at the North; and consequently that it required a modification of treatment accordingly, my object has been to invite the attention of Southern physicians to these points, in order that they may test the correctness of my observations, and with the hope that my hints may not be found altogether without utility.

This fell destroyer of human life had visited almost every part of the American continent, before it reached Savannah.*—Early in the Summer of 1834, it broke out in Canada and New York, and we could not hear of its being nearer Savannah than Washington City, when about the 1st of September, it was reported by the health-officer of the port of Savannah, that some

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*It had approached in October, 1832, within 100 miles of Savannah—having been carried to Folly Island near Charleston, in the brig Amelia, from New York, which was wrecked on Folly Island.
cases very much resembling in their appearances, Cholera Asphyxia, had occurred on the plantation of Maj. Wightman, about 12 miles above the city, immediately on the Savannah River. These cases were soon followed by others. The disease confined itself to this plantation for some little time, and the number of cases was large, before it extended itself to other adjacent plantations. It at length progressed, and after attacking one or two places above Maj. Wightman's, pursued a downward course, until it visited every plantation on the river, even the last below the city. This occupied about three weeks, and during this interval there occurred but six or eight deaths in the city, and most of these cases originated in the country.

A very few days after the disease broke out at Maj. Wightman's, we heard that it had made its appearance on the River Ogeechee, 15 miles from Savannah, and without any of the intermediate places being affected.

Cases of the disease continued to occur in the city and along the course of the Savannah river, until late in the Fall. Since 1834, cases have occasionally been met with, resembling the disease under consideration, more or less nearly; but usually they have proved very manageable.

In the year 1832, when Cholera first made its appearance in America, and prevailed to such an extent in our northern and western cities, there was observed a very strong predisposition to bowel affections among the inhabitants of this vicinity, in common with those of all other parts of the United States. So much was this the case, that we were obliged to administer cathartics with the greatest possible caution, in the treatment of our ordinary fevers. But in 1834, previous to the appearance of the disease at Maj. Wightman's, it is remarkable that there was no strong epidemic tendency to bowel affections observed. As the disease advanced, the predisposition accompanied it, and three-fourths of our population were affected with cholerine or choleraid. It was remarked, however, by other physicians, as well as by myself, that other diseases did not so far assume the "livery" of the reigning epidemic, as to render any material modification of their treatment necessary. In the treatment of our ordinary fevers, we were enabled to prescribe cathartics with the same freedom as in ordinary seasons.

According to the accounts of writers on the subject, it will be
observed that Cholera, among us, differed in this respect from the disease which prevailed elsewhere. The symptoms of the disease which raged in this vicinity, were at variance in many respects with what it assumed in other places. According to my observation, the cramps in the extremities were not as much complained of as is generally stated—nor do I think that the discharges from the stomach, bowels, and skin, were usually as profuse. It was not always possible to ascertain with precision, the quantity which had been discharged from the stomach and bowels; but I judged of the lesser profuseness of these discharges, by what I could gather from enquiry, and from the extremely phlogosed condition of the mucous membranes, which remained after death, as discovered by dissection. When the discharges have been very profuse, the inflammation is relieved, and there are no traces of it observed in these membranes, excepting such as are indicated by their diminished consistence, &c. In every case it could be ascertained on enquiry, that the patient had been affected with diarrhoea, accompanied with more or less pain in the bowels, for some days or hours previous to the superposition of collapse; and this diarrhoea was always at first bilious. With greater or less rapidity, the stools lost their bilious appearance, became almost perfectly transparent, or semi-opaque, like water in which rice has been washed or boiled—and often the same matter was thrown up from the stomach. The patient soon became as cold as marble; lost his pulse; the skin for the most part was dry, and not always shrivelled; but inelastic. The tongue was sometimes blue and cold—at other times warm, always moist—sometimes clear, then again foul: The patient in the cold stage complained of no pain, merely of weakness and fatigue. Sometimes when not disturbed, he lay in a stupor, with his eyelids half closed, and the balls turned up; at other times there were great restlessness and tossing from side to side. The voice in some cases was very weak, and reduced to a whisper; in others, where the collapse was confirmed, the voice continued nearly as strong as natural. Although great weakness was complained of, the muscular strength was retained to a surprising degree. I have been informed by other physicians, that they observed the sensibility impaired to so great a degree, that boiling water poured on the skin was scarcely felt. I did not notice this in any case. I poured boiling water on the legs of a negro
man in confirmed collapse, which he felt so acutely, that he leaped up instantly and appeared to be in great agony.

In those cases which were fortunate enough to pass through the stage of collapse and react, a pretty severe bilious fever succeeded, attended in some instances with violent gastritis, as manifested by the blood-red and furred tongue, and with great determination to the brain, producing coma more or less intense. Sometimes this reaction rose so high, as to require very profuse and frequently repeated bloodletting, to protect important organs.

My personal acquaintance with Cholera, commenced at the plantations of the estate of Thomas Young. On the 6th of September, 1834, I visited the place on the upper part of Hutchinson’s Island, called “Ham.” Two negro men had been attacked with the disease, while cutting rice in the field, and were found dead on my arrival. It is most probable that these individuals had laboured under diarrhœa some days or hours previously, which had been neglected by them—the fact, however, could not be ascertained.

On the 7th of September, I visited the back river plantation, called “Fife.” I found two men collapsed—one with very little pulse, the other with none. Not having seen any case previously, I prescribed the treatment which I understood had been successful at Wightman’s, and which was as follows: R. Calomel, gr. x.; Gum. Camphor, gr v.; Gum. Opii. gr. i.; every hour.—Sinapisms to the extremities and abdomen. I endeavored to excite vesication by pouring boiling water on the extremities; but found it productive of such extreme distress, even in the deepest collapse, and attended with no perceptible good result, that I very willingly abandoned it.

Uncertain as to the treatment best adapted to the disease, as presented to my notice, I determined to avail myself of the first opportunity of post mortem examination, in order to ascertain, if possible, the true pathological condition of the organs. Accordingly two cases presented themselves—both had passed into the stage of collapse before I saw them. The treatment above detailed was prescribed—death supervened in from 12 to 24 hours after they took to their beds, although I have no doubt a diarrhœa must have existed previously. At the time of their death, they had taken about xl. grs. Calomel, xx. gr. Camphor, iv. gr. Opium.
In the first case examined, the mucous coat of the stomach was found intensely inflamed throughout—the Calomel had not passed from the stomach. There was a slight inflammatory blush throughout the mucous coat of the small intestines, which contained a tenacious creamy matter. The large intestines exhibited no traces of inflammation, they were entirely empty, with the exception of the Coecum, which contained small particles of hardened feces resembling gall stones. The vessels of the external coat of the intestines were much injected, and the whole exhibited a bluish tint. The liver was pale and exsanguine; gall bladder distended with bile; kidneys pale and bloodless; spleen rotten; bladder contracted and empty; mesenteric glands enlarged. The abdominal muscles, when cut through, exhibited an unusual stagnation of blood in the small vessels.

The second case examined displayed the same intensity of gastric inflammation as the first; but in this case, the inflammation of the intestines was quite equal to that of the stomach, and in the colon blood was effused in several spots. The intestines and stomach were filled with the rice water effusions. In this case, the bladder contained some urine. The appearance of the liver, kidneys, mesenteric glands, and external coat of the bowels, was similar to what was observed in the other case. In both cases, the fat of the omentum, as also that surrounding the kidneys, was entirely absorbed. In the last case, the spleen was natural as to size and consistence.

As the result of this examination, I became averse to the employment of active stimulants and narcotics, in the treatment of a disease which presented so many and such decided appearances of intense phlogosis. The idea of applying camphor, opium, capsicum and alcohol, to such surfaces as the scalpel had brought to light, was revolting in the extreme. I therefore endeavored to adopt a practice as strictly sedative as possible.

Bloodletting was accordingly resorted to at the commencement of the attack, when the subject was robust and the pulse active—a blister was applied to the abdomen—and gum-water the only nourishment allowed.

In some slight cases, unattended with vomiting, a few grains of pulv. dover, were prescribed with benefit; soda-water was given to check vomiting; sinapisms and stimulating frictions, with an infusion of capsicum in alcohol, or spiritus terebinth. 
were employed to favor determination to the surface, where a centripetal tendency was observed.

These means, in a vast number of instances, were sufficient to check the disease, even in some cases where collapse had commenced.

As the disease advanced in its career, I was induced to modify the treatment and adopt a course still more antiphlogistic and depletory.

Hitherto, I had refrained from the use of cathartics at every stage of the disease, and every thing calculated to increase the peristaltic action of the bowels—being governed by the injunction of northern physicians, who asserted that instances were frequent, where the disease was aggravated, and the patient precipitated into the stage of collapse, by the injudicious administration of a cathartic. And accordingly my efforts were always directed to arresting the frequency of the discharges, and for this purpose, as has been stated, the narcotics were occasionally employed. I found, however, that the first stage of the disease could be treated with more certainty, and much better effect, by the speedy removal of bilious accumulations, which usually existed at that time, and by a total abstinence from narcotics.

The following course was therefore pursued: The patient being attacked with cramps in the bowels and diarrhoea, with frequent and profuse bilious dejections, he was bled from the arm until the commencement of syncope, or until the pulse began to yield—a large blister was applied to the abdomen—and as soon as the effects of the bleeding had subsided in some measure, xx gr. of calomel were administered and succeeded by a table-spoonful of castor oil, in two hours; gum-water the only drink allowed.

When vomiting has supervened, and the discharges have assumed the rice-water consistence and hue, the cathartic is a doubtful remedy, and I think, should be avoided. The vomiting will usually soon cease, if the patient is not allowed to take any thing into his stomach, even the smallest quantity of drink, and a sinapism applied to the epigastrium. When the collapse has commenced, venesection should be practised with great caution, as I have seen it obliterate the pulse entirely, and confirm the collapse.

The cold stage of the disease,—or as it is usually called, the
stage of collapse, was regarded here as elsewhere, the moribund condition. The patient has parted with an important portion of his vitality; the hand of death is upon him. The vital spark is nearly extinguished, and we know not with certainty, "where is that promethean heat, which can again its light relume."

If the profession here cannot boast of more success in the treatment of this stage, than occurred elsewhere, I do not believe that they have to reproach themselves with less. Recoveries from collapse are pretty nearly as rare, as from the black vomit stage of yellow fever; the community, therefore, should be deeply impressed with the importance of commencing the treatment of the disease with energy in its forming stage. Many lives have been lost by neglecting a midnight attack, until morning light exhibited the hopelessness of their condition.

The stage of collapse has generally been described, as induced by exhaustion from the immense effusions of the serous portions of the blood. Doubtless this explanation will suffice in many instances, and in such, the mucous coat of the stomach and intestines is found free from all traces of inflammation, it having been reduced by the excessive effusion. But in a great number of cases which came under my notice, it did not strike me that this explanation was altogether satisfactory. It did not appear that the discharges had been as profuse, as were usually represented; and in most instances, the skin was dry, instead of being bathed in perspiration, and not shrivelled. This was the fact in regard to the two cases, the post-mortem examination of which has been detailed—and it was to the comparatively small amount of effusion, that was to be attributed the intensity of the mucous inflammation exhibited by them. It seemed as if the general excitement of the system, was wholly absorbed by that of the internal organs, which induced the collapse.

It would be difficult to say what course of treatment was not essayed by our physicians, during the stage of collapse. One plan was very nearly as successful as another. Some pushed the diffusible stimulant practice to the utmost extent; others exhibited an incredible amount of mercury in an equally incredible short space of time. According to my observation, the patients under both plans, sank with more rapidity, than when they were left almost entirely to nature. Nor could it have been reasonably expected to be otherwise, considering the pathology of the
disease. For is it not more probable, that when the balance of excitement is so much in favor of the central organs, the application of active stimulants and irritants to them, will serve to fix this hyper-excitement more firmly; and that it will be much more difficult, if not impossible, to diffuse the excitement, however much we may stimulate the surface and extremities?

Very soon after the appearance of Cholera among us, I tried during the cold stage the emetic practice, as recommended by Drs. Chapman and Hopkinson of Philadelphia.

I visited a plantation below the city, where I found two negroes collapsed; one a young girl, the other a middle-aged man. The girl was pulseless—the man not entirely so. The salt water emetic was administered to each, which vomited them actively. The puking having ceased, xx. grs. of calomel were given, and it was directed that it should be repeated in x. gr. doses, every hour, until they had taken 3i. At my next visit, on the following morning, I found that the girl's system had reacted completely—the man was in articulo-mortis, and died in a few minutes. The girl labored under the usual fever of reaction for some days, and slowly recovered. This was the only instance in which I observed this practice successful, although I employed it repeatedly.

I have since, however, had reason to believe that the emetic would be followed by good results in many instances, if it is not succeeded by the calomel—and would therefore recommend, that when it be employed, every thing calculated to irritate the stomach and bowels in the smallest degree, should be withheld, and that the patient be allowed to take nothing but mucilaginous drinks in small quantities, of which gum-water is best. At the same time, the excitement should be invited to the surface, by the application of sinapisms and stimulating frictions.

The emetic appears to act beneficially in some instances, by means of the shock which its operation communicates to the system, and the centrifugal impulse which it occasions. It is probable that the emetic is better adapted to those cases, where the inflammation of the mucous membranes has been in a great measure reduced, by the excessive profuseness of the discharges. Where there is much inflammation remaining, its utility is questionable.

I do not think that calomel should ever be given except in the
forming stage of the disease, and then as a cathartic. I consider it a doubtful remedy after the discharges have assumed the rice-water character.

I am aware that the remarks, contained in this paper, may not escape the cavils of a portion of the profession. I give them, however, as the result of my convictions, and they must stand or fall by the test of subsequent experience.

ARTICLE III.

Remarks on the Pathology and Treatment of Intermittent and Remittent Fevers, with cases. By Lewis D. Ford, M. D., Professor of Chemistry in the Medical College of Georgia.

I have united these two forms of fever in the following remarks, because of the striking resemblance of their features generally, and under the conviction of the great similarity, if not identity of their pathology. They resemble each other strikingly in the symptoms precursory of the formal attack, and in the first distinct paroxysm so closely, that the most expert observer will not pretend to foretell which of the forms the disease will subsequently assume; also in the progression of the symptoms of a paroxysm and in its duration. We infer their general similar nature further, from the fact of their simultaneous appearance in different individuals under similar circumstances of exposure, and from the fact that they mutually run into each other.

Taking it for granted, that they both arise from an external cause, which cannot be doubted, whatever difference of opinion may exist as to what that cause is, what it should be called, &c., the question naturally occurs—Can we render an account of the fact, that under the agency of this identical cause, one
form is determined in one individual and the other in another? for if we can, we may be confirmed in the opinion of their general similarity and deduce from this explanation some useful practical directions. On exposure to this external cause, an individual suffers a regular paroxysm of fever. After a certain intermission, comes another and another; we may infer, that the cause, at the moment of becoming efficient in producing each paroxysm, finds the organs of the system generally in the same state, as at the commencement of the first—or if previous paroxysms had produced alterations in some of them, they are not such as to counteract the regular succession of the phenomena of the paroxysm. But, while under the same external circumstances, this case becomes remittent, when we will generally be able to discover some physical or functional signs of disorder of some of the organs of the head, chest, or abdomen—this morbid change, at first slight, not of a degree to produce danger, under a state of quietness approaching to that of health, but liable to be increased to a dangerous degree by the agitations of succeeding paroxysms; and it is matter of observation, that if these super-added disorders of the organs be not relieved, they are increased by every succeeding paroxysm, and disturb more and more the regular periodicity of the fever; which in its progress to a fatal termination, exhibits more and more distinctly, the marks of this local affection. Hence we conclude, that if of two individuals under similar exposure, an intermittent be determined in one, and a remittent in the other, that there is some visceral irritation in the last, either pre-existing the attack and increased by it, or altogether determined by the first paroxysm itself, and that as long as the fever preserves its periodical character, even in this modified degree, it does so under the influence of the same organic condition on which the perfect and regular periodicity of an intermittent depends.

What then is the pathology of this intermittent fever? which from the time of the earliest records of medicine, to the physicians of all ages, has presented in its different forms, one unvarying character—a character so uniform, that the description of the simple disease by Hippocrates, would graphically represent those cases seen by ourselves. For it is worthy of remark, that the practical history of intermittent fever was perfected by Hippocrates himself; that is, its external developments accurately
marked—and even the names of its various forms, imposed by this great father of the science, are retained to this day. The question then, as to the pathology of this disease, becomes one of peculiar interest to the philosophical physician, since from this uniformity, it has presented a subject so favorable for investigation—allowing the science of each succeeding age, to hold fast and establish those principles as to its nature, which were true, and gradually to discard those that were erroneous. In this point of view, its history is calculated to illustrate the powers and resources of the science. It may be interesting to trace its history in a very general manner, and to connect the opinions entertained as to its nature, with the prevailing philosophy of the most prominent systems; for the fact, that we do not now understand its pathology, is well calculated to produce doubt as to the certainty of the science of medicine, after all the confident and boasted pretensions of these various systems to have explicated its nature; which doubt will be removed by the conclusion to which we must necessarily arrive, that the science has not attained to this knowledge of its nature, because of the defective modes of its investigation.

Hippocrates, with his admirable principles of forming medicine into a science of observation and of facts, with wonderful exactness, recorded the phenomena of this disease; and if he had applied the same scrutiny to the interior of the human body, his theory might have been valuable—but what could be expected as to its pathology, from him, who understood not the difference between a ligament and a nerve, nor that these were the channels of sensation; who attributed motion to the agency of the tendons; who was ignorant of the circulation of the blood, and understood not the functions of the brain? The philosophy of his age, had established the dogma of the existence of the four elements of nature, and in accordance with the spirit of the times, which was seeking for comparisons and strained analogies between the universe and the human body, he established the dogma in medicine, that the body was composed of four humours, &c. and that diseases depended upon a super-abundance or depravation of one or other of these.

Author of the excellent principle of ever having some definite and specific object in view in the treatment of disease, his indications in this instance, were founded upon his hypothetical views.
of its proximate and occult causes—viz.: to aid nature in the concoction and expulsion of the peccant humour. Such is the conclusion of him, who set out with the declaration, that observation and just deduction are the only true means of advancing medicine. What a conspicuous example of the uncontrollable tendency of the human mind to vain and unprofitable speculation, do these views of this great man exhibit—apt prototype of the medical philosophers of all succeeding ages!

Galen, 500 years after him, his admirer and commentator, with greater exactness, attributed the quotidian form to the predominance of the phlegm, tertian to that of the ordinary bile, quartan to the black bile. The opinions of Hippocrates, thus extended and stamped with the seal of this great master, continued to control the minds of their successors to the time of the introduction of the system of chemical medicine. To give but one single example of their pathology: A celebrated partisan of this school, had determined very exactly, the composition of the globules of the blood to consist of phlegm, salt, sulphur and earth—that fever in general consisted in an unnatural fermentation of these—and that intermittent fever especially, was generated when the salino-acid and acrid principles, happened to get into the small vessels!

Whatever credit is due to the celebrated German reformers of the commencement of the 18th century, for overturning the chemical and humoral doctrines, their pneumatic system was calculated to establish nothing certain with respect to the intimate nature of this and other fevers. Stahl distinctly discourages the application of physical and chemical science to medicine, and especially denounces the study of minute anatomy, lest it might lead men to the belief that disease sprung from changes in these delicate parts, and thus draw them away from the study of the great laws of the organization, and from an examination into the alterations of the vital principle. We are not surprised at the deductions of this system as to the nature of fever—fancifully representing it to be a commotion of the system, excited by this active principle—this soul, thus roused to this extraordinary effort to free itself from an offending cause.

In the "First Lines,"—the text book of the elder of the present generation of medical men, we find this same mysterious agent, under the name of the vis medicatrix naturæ, raised up to explain
some of the changes in a paroxysm of intermittent. It is there characterized as "an agent," as "making efforts,"—and we would suppose from the peculiar phrascology, that all the instances in which this supposititious power exerts itself, and even the modes of its operation, were well known to, and exactly appreciated by the Edinburg professor—for there is this remarkable sentence, occurring too by way of argument in favor of his peculiar theory: "Because, in almost all the cases in which an effort is made by the vis medicatrix, a cold fit and a spasm of the extreme vessels are almost always the beginnings of such an effort"!—And after making this agent bear so conspicuous a part in his pathology, he arrives at the flattering conclusion, that "this doctrine will serve to explain the nature of fever in general," &c., and modestly congratulates himself upon having thus been led into "the proper train of investigation."

An American critic* upon Dr. Cullen's theory of fever, expressly avows his belief in the "existence" of this hypothetical agent, formally assigning to it functions; and he too, is well acquainted with its various offices, for after mentioning some, such as the knitting of fractured bones and the healing of wounds, he adds, "and many other processes which we cannot now enumerate"!—He speaks of it as "a curative cause." In his opinion, it controls every thing, medicines and all—"were it not for its action, recovery from disease would be absolutely impossible." After declaring that the reasoning of Dr. C. is "forced and artificial, unsatisfactory and confused," he asserts his belief with the fanciful Darwin, that fever is a disease of association—that it is formed alone through the medium of "sympathy."—We are irresistibly tempted to apply to this criticism, the remark of Dr. Johnson, upon some of Mr. Travers' speculations: "this is like casting out devils by Beelzebub the prince of devils."

And even in the latest of those "Practices of Physic," with which our medical literature so much abounds; in which one man attempts to develope the nature of all diseases in a general and superficial manner, instead of confining himself to the critical and philosophical investigation of one—those books that tell "Baith the disease and what will mend it,"—and the popularity of which books we believe to be one of the causes of our lean and meagre

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*Professor Caldwell.
attainments in medical science, by discouraging the printing and reading of Monographs—the "Practice of Physic" of M'Intosh, contains an illustration of the difficulty of putting down and keeping down this volatile aerial spirit, which from Hippocrates even till now, under the names of "Nature," "Archeus," "The soul," "The vital principle," the "Vis medica," and the "Vis medicatrix naturae," has been called up, to cover with its imposing veil, the ignorances of the science. He says, "It is best to attribute the reaction of fever to the Vis medicatrix naturae, which is ever in action to prevent injury and to remedy the evil after it has occurred." This remarkable sentence follows the formal declaration in the same paragraph, of "Acting upon the principle of not enquiring into occult causes!"

To those in and out of the profession, who are disposed to undervalue it from an examination into the history of opinions upon the nature of this disease, we would say: Shall it bear the reproaches, which are justly due only to those, who have so far departed from all true philosophy, and indulged themselves in this idle hypothesis-making? Who, instead of frankly and unreservedly acknowledging that they could not render a just and true account of it, have resorted to the agency of fanciful fictitious principles, thus contributing to the perpetuation of this false philosophy of occult causes, and to the stifling of judicious enquiry, by leading the minds of the young to rest in these false explanations.

But the times of this scientific magic have passed away. The severe medical philosophy of the present day, basing itself upon the principle which lays at the foundation of both the science of physiology and pathology—that there is no action of the human system, healthy or morbid, that does not result from the application of material agents acting upon the tissues of the system; rejecting with utter abhorrence, the agency of any of these fanciful abstractions; refusing to spend its high powers in investigating diseases of elementary properties and qualities; questioning the validity of every dogma, ancient or modern; studying medicine as a physical science; is seeking for the nature of diseases in the alterations of the tissues; is patiently collecting facts, declaring that we are not yet ready for the deduction of general principles to form a system. The celebrated disciples of this true philosophy in France and other countries, warned anew by
the ephemeral history of the commanding physiological system, of the danger of being too hastily betrayed into generalization, seem disposed to adhere with increasing faithfulness, to this only rational method of investigation—And accordingly one of the most eminent of the present French physicians, M. Rostan, author of organic medicine, classes this intermittent fever among those affections, whose pathology is unknown; and calls it "the despair of organic medicine"!—considering it hopeless ever to arrive at any certain and definite knowledge of the cause of intermittence. This last conclusion, however, we cannot but regard as unphilosophical—it is a denial of the omnipotence of the philosophy of observation; for who shall limit its discoveries, that regards the present state of the physical sciences, attained under its happy guidance?

We should not doubt that the accumulated observations of the present age, will discover some fixed and uniform physical, organic changes, upon which this singular disease depends, and thus arrive at a knowledge sufficient to guide us with a steady and satisfactory light, into correct principles of its treatment.—For we anticipate that this disease will claim in an eminent degree, the attention of the present generation; the pride of the science is concerned in explicating the nature of an affection treated so empirically, yet so successfully.

Convinced of the importance of recorded facts, I have been induced to make from my note-book, a brief abstract of the following cases, observed from the 23th July to the 1st of October.

1. First visit, July 28. A negro woman, æt. 40; of good habits, a washer—with a regular quotidian: suffering during fever, with distressing nausea and oppression of the precordia, sighing, and hurried, irregular respiration. Having suffered in December last an attack of colic, with excessive pain over the whole peritoneal surface, but without effusion, and treated by cupping and blistering the spine, I was induced to examine it now, and found a remarkable degree of tenderness on pressure, at the 2nd, 6th and 7th dorsal vertebrae—pressure there increasing the nausea and labor of respiration. She was cured by calomel—purging, and subsequent use of quinine; sinapisms to the spine relieving nausea, when applied during the fever.

2. August 4th.—A negro waggoner, æt. 30, suffered with bilious fever, according to his account, at Macon; has been up for
a fortnight. Now has fever at night; pain in the bowels and stomach; pain on pressure over the whole abdomen; regular stools; tongue slightly furred white; diminished appetite; pulse not increased in frequency; general languor and anxious countenance; spinal tenderness at superior of the back. By gruel diet and a blister to the spine, the following day he was entirely relieved from pain, bearing the freest pressure of the abdomen; appetite returned, and tongue clean; countenance cheerful.

August 10. After severe exercise, had a chill last night, followed by fever, which has declined. Now, same soreness of abdomen; yellowish-white furred tongue; pulse 90, and soft; some tenderness of dorsal vertebrae. After being purged freely with calomel, the soreness of abdomen unrelieved, on the evening of 11th, had another chill with fever—but a lighter paroxysm than the first; the spine still tender on the 12th. A blister then relieved all soreness of abdomen and checked the chill without further medicine. On the 27th, while at work, was again taken with fever, and took calomel, &c. On the 28th, at 4 p. m., a severe ague, followed by fever. On the 29th, saw him—the vertebrae still sensitive on pressure; a blister again checked the chill and he has had no further return.

3. August 6.—A negro boy of 9 years; irregular fever, after eating much fruit; no spinal tenderness. Relieved by emetic and purging.

4. Negro woman, æt. 25, of good constitution, uniformly healthy. Case of quotidian intermittent, accompanied during the paroxysm with great depression of spirits, weeping and sighing, and distressing nausea and vomiting, with general soreness of the abdomen; exquisite pain of the upper and middle dorsal vertebrae, on pressure. After purging with calomel, &c. ; cups with scarification of spine during a paroxysm, entirely relieved the nausea, vomiting and soreness, restoring her cheerfulness; and a blister to the spine arrested the disease.

5. August 8.—A white boy, æt. 16; delicate; six weeks since had chill and fever, which was checked by quinine. Sixteen days ago, was suddenly seized with violent pain in the right knee, which was relieved by stimulating applications; the following day, a chill, and since a regular double tertian. The 7 or 8 superior dorsal vertebrae distinctly tender on pressure. On the decline of paroxysm to day, was purged with magnesia
and salts, and freely scarificed and cupped on the spine, which was repeated on the 9th; and the chill, without the use of other means, was arrested. On the 17th and 18th August, he suffered a paroxysm each day; the spine still sensitive; a blister checked the disease promptly, and he has since continued well.

6. August 15.—A mulatto boy, æt. 16, a painter. This was a case of double tertian, characterized by excruciating pains during the paroxysms, in the limbs and epigastric region. Extremely offensive breath and heavily furred tongue; and very great tenderness of the spine, from the third vertebra down.—Treated with calomel and oil, and cupping and blistering the spine, which brought it to the simple tertian form and much mitigated the violence of the symptoms during the paroxysm; the quinine was finally used, and on the 19th, he was discharged.

7. August 14.—A female, æt. 60; full habit; has within the year past, suffered frequent attacks of colic, which have been uniformly relieved by blisters to the spine, which was always found sensitive. On the 12th, under strong moral excitement, was seized with a chill at 12 M., which was followed by intense fever. Took magnesia and salts, on the 13th, which operated well, and had no chill. 14th. Ague at 8, A. M.; at 10 A. M. found her with flushed face, very loquacious, great fullness of head and confusion, tongue clean, bowels open, great oppression at the epigastrium, frequent sighing, pain in the shoulders, sides and bowels generally; epigastrium very tender on pressure; exquisite pain on pressing 4th and 7th dorsal and 1st lumbar vertebrae. Three cups, with scarification to the spine, relieved the oppression of the stomach and head signally, before the end of the operation: which was followed by copious perspiration and relief to all pain; she passed the night sleeping and waking alternately, in unusually quiet sleep, and great calmness when awake. Sinapisms being repeatedly applied to the spine, and quinine taken for the two following days, there was no return of fever, and her general health since is very much improved.

8. August 17.—This was a case of protracted remittent, a girl of 14; subject to monthly epistaxis, never having menstruated; of a feeble constitution, &c.; frequently renewed by improper diet, lasting to the 1st of September. Early in the disease there was acknowledged sensitiveness of the 4th dorsal vertebra, but in frequent subsequent examinations it was not mani-
fest. It disappeared after copious diarrhoea, produced by eating a tart.

9. August 24.—Negro boy, aged 15; a race rider; has had repeated attacks of quotidian intermittent; a paroxysm to-day, but he is now up and in good spirits; no tenderness of spine. Toast-water and gruel; blister to spine drew before the usual hour of attack, and he has since escaped the chill.

10. August 24.—Negro man, aged 30; carriage driver; stout hearty looking fellow, enjoying ordinarily, perfect health. Chill and fever 22d; 23d, fever at night; 24th, at noon, slight fever; head-ache and back-ache; furred tongue white; no tenderness of epigastrium; very great tenderness of 4th, 5th and 7th dorsal vertebrae; was purged freely to-day; 25th, no tenderness of spine; chill at 12 m.; 26, still fever continued, increasing in the afternoon; 6th and 7th dorsal vertebrae very sensitive; oil as fever declined, and blister to spine at night. 27th, blister drew; no fever. 28th, had light chill, (it was a cold rainy day,) followed by very little fever. 29th, took quinine; and subsequently had but one light paroxysm of fever.

11. August 24.—Stout, healthy field negro, aged 25, has had from the 19th a double tertian, and on 22d took large doses of calomel and oil, which operated copiously; this the day of the lighter paroxysm; now 1 p.m., slight head-ache, tongue covered with thick, white furr, moist, no appetite; great tenderness of epigastrium, producing panting on pressure; bowels open: great tenderness of the whole dorsal spine, particularly of the lower region and of the last cervical; free pressure produces great distress, and particularly, irregular respiration. No medicine, nor food; blister six inches long to spine. 26th, blister drew well; pain of abdomen on pressure, none, except at the epigastrium; expresses a sensation of great relief from the time of drawing of the blister. Toast water, and a small blister to epigastrium. The following day his appetite was imperious; tongue clean; no pain, and walking about.

12. August 28.—A gentleman, aged 50, of good general health and habits; unwell generally on the 24 and 25; fever on night of 25; 26, chill at 5 p.m. and yesterday at the same hour; suffered a violent paroxysm of fever last night, has dictated closely; oil yesterday, producing great prostration after each stool; this morning, at 10, is setting up; no pain, no cough, no tenderness
of epigastrium; pressure upon the 5th, 6th, 7th dorsal vertebrae producing exquisite pain, forcing groans from the patient; no medicine; gruel diet. Blister immediately to spine, six inches by three, which drew in four hours. No chill or fever to-day, but comfortable night and sense of great relief generally. 29th. Sinapisms were ordered to spine, above and below blistered surface at 3 p. m.—but the chill returned at 12 m., the fever being much lighter than formerly, and underwent the operation of oil on the decline of this paroxysm without any unusual debility.—He subsequently took quinine and had light paroxysms in the nights of the 30th and 31st. The tongue becoming very foul, on the 31st, took calomel, which operated freely. Sept. 1. This morning, without fever, the tongue was furred and the left half very dry; but this was evidently owing to the loss of the left lateral incisor and stomach teeth, at which aperture the air entered in breathing. He took quinine freely to-day, and had afterwards but one light paroxysm of fever without chill.

13. Aug. 30. Negro boy, æt. 12; has had Intermittent fever for three successive summers. Has now had four paroxysms. Second and sixth dorsal vertebrae tender slightly; a blister and quinine after a cathartic relieved him promptly.

14. Aug. 30.—A hale, strong negro man; chill yesterday at 12 m.; second, sixth and seventh dorsal vertebrae sensitive on pressure. Oil and a blister to the spine. No more chill or fever.

15. Sept. 1.—A young man, æt. 20, a close student. This was a case of remittent fever, with daily exacerbations in the afternoon, preceded by a momentary chilliness sometimes—accompanied with severe head-ache, but without any trace of spinal tenderness. Treated by bleeding; calomel and oil, and quinine in the remissions, terminating on the sixth; the durations and violence of the paroxysms gradually diminishing.

16. Sept. 3.—A gentleman, æt. 30; of full habits, dark skin, and phlegmatic temperament, good habits; has had three paroxysms of anticipating tertian; suffering with the paroxysm to-day, most distressing nausea; fifth and sixth dorsal vertebrae quite sensitive; having taken calomel yesterday, the bowels were open. Blister applied to the spine drew well, and he took quinine the following morning. He had no more chill, but irregular fever until 8th—having been treated in the intermissions with calomel and quinine.
17. Sept. 3.—A single female of bad habits, æt. 21; but good general health, and regular menstruation. Has had a paroxysm of intermittent to-day; one yesterday. Saw her in the sweating stage; eighth and ninth dorsal vertebrae sensitive on pressure; was purged freely to-day and blister applied to spine; the following day no paroxysm, was ordered quinine; but did not take it with any regularity; had return of chill for two or three days, when finding it impossible to make her take medicine, the case was abandoned.

18. September 4th.—A negro woman of good constitution and general health; had a chill yesterday followed by fever; saw her without fever; the dorsal vertebrae from the second to eighth sensitive on pressure. A mercurial cathartic acted briskly on the bowels, and she had no return of chill; some fever the following night.

19. Sept. 5.—A boy, æt. 10, in the country. Chill on the 31st, followed by fever remitting daily; every second day the fever more violent, but represented as never entirely free from it.—Took 10 grs. calomel last night, six copious black stools; complete apyrexia to-day; fifth, sixth and seventh dorsal vertebrae very tender on pressure. Blister to spine; saw him on the 8th, at 8 a. m., has had two severe paroxysms of fever, but no chill: involuntary micturition; stupid, with difficulty aroused; pulse 110; skin pallid and damp; bowels have been kept open by oil: tongue very dry and red; took 10 grs. quinine during the day, and at evening was less lethargic; the tongue moist, red at edges, white in the middle. 9th, 12 m.; no stool; this morning was reported to be free from fever, and took 5 grs. quinine; now very restless and sighing; pulse 120; skin hot and dry; tongue very dry and hard; has coughed once or twice to-day; evidence of bronchitis, on examination with stethoscope; no tenderness of epigastrium; 1-8 gr. tart. antimony every hour, to be discontinued on purging. From this time this patient began to improve, the fever gradually abating, and was discharged on the 14th convalescent.

20. Sept. 5.—Boy six years old; has had a quartan intermittent for four weeks, the chill coming on exactly at sun-down. No fulness of abdomen; good appetite; regular bowels; complexion fresh; no spinal tenderness on the freest pressure; chill expected to-morrow; no medicine; blister six inches long to
dorsal spine to-morrow at 11 a.m. It drew speedily; he had no chill, but a very light fever for two or three hours during the night. The following day of attack, sinapisms were applied to parts of the spine not occupied by the blister; and he had only a light fever. Subsequently he has taken quinine, and recovered.

21. Sept. 5.—Boy 12 years of age; a dirt-eater, white skin, transparent ears, tumid abdomen, enlarged spleen; has had several paroxysms of a tertian; has considerable tenderness of the 5th and 6th dorsal vertebrae; has taken oil. A blister to spine did not arrest it; and quinine was added to the treatment.

22. Sept. 5th.—A girl, æt. 13; of good general health; has had two paroxysms of fever, without chill; slight chill to-day, and two light chills on the following successive days; treated with cathartics and quinine. Examined on the 6th, there was no spinal tenderness; but on the 8th, there was slight uneasiness felt on pressing the fifth dorsal; and on being discharged, the same degree was still perceptible.

23. Sept. 9th.—A dirt-eating girl, about 9 years old; apyrexia now; is represented to have had irregular fever, with one chill, for six days. Has taken castor-oil; sixth and seventh vertebrae very sensitive. Blister and quinine to-morrow. Instructions being neglected, the following day dismissed myself from the case.

24. Sept. 12.—A carpenter, æt. 25; robust and strong, and generally healthy. 8th, chill at 4 p.m.; 9th, fever rising at noon, without chill; 10th, up early, without fever; at 7 a.m., severe ague; 11th, perspiring in the morning; fever rose at noon, without chill; ague to-day at 7 a.m.; has taken pills to-day, probably of lobelia, sent by the Steam Doctor, which have vomited him copiously. Fever now declining; fifth, sixth and seventh dorsal vertebrae extremely painful on pressure. A blister to the spine and quinine in two grain doses, checked the disease after one more light paroxysm.


26. Sept. 14.—This was a case of irregular tertian in a girl of 11 years of age; fourth, fifth and sixth dorsal vertebrae ex-
Intermittent and Remittent Fevers, &c.

27. Sept. 14.—A girl 11 years of age. To-day had second paroxysm of a tertian; fourth, fifth and sixth dorsal vertebrae very tender; oil, blister-plaster and quinine, &c. Directions were disobeyed; had a paroxysm on the 16th, when blister was applied and quinine irregularly taken; only one more paroxysm.

28. Sept. 16.—A strong athletic negro man, 25 years of age. After two days of indisposition, has had two paroxysms of chill and fever on successive days; exquisite tenderness of fourth, fifth and eleventh dorsal vertebrae; a blister and quinine in 2 gr. doses, put a period to the disease immediately.

29. Sept. 16.—A widow, aged 50; hysterical, habitually copious urine and pain in region of kidneys. On the 10th had an eruption of urticaria, with nausea; oppression of epigastrium; has since been feverish at night. This morning an ague of an hour's continuance, followed by fever, and the most excruciating pains in all the limbs and sides and back; compared to the hammering of the bones. Great oppression of stomach and chest; frequent sighing; fourth, fifth and twelfth dorsal vertebrae exquisitely painful, on pressure and percussion. Sinapism to spine, during fever, abated the violence of the pains; oil on decline of fever. Two blisters to spine at night, and quinine in 3 gr. doses, prevented a return. She suffered intense head-ache on the night of the 18th, which I attributed to the use of quinine during the day.

30. Sept. 16.—Negro boy, aged 14. This was a case of remitting fever, in which there was no sensitiveness of any part of the spinal column. Treated by V. S. and calomel purging and quinine in the first remissions. About the sixth day, the fever increasing in violence, with intense head-ache and delirium, dry tongue, &c. After a second bleeding, and blister to dorsal spine, the case was soon terminated favorably.

31. Sept. 18.—A widow, æt. 50; general health not very good; hysterical. Has had three paroxysms of a tertian; one this morning. Fever now declining; fifth dorsal vertebrae very tender. Calomel and oil, and blister and quinine, prevented another paroxysm.

32. Sept. 18.—A single female, æt. 25; of regular menstruation; but for four years has suffered pain in the left hypochondri-
um, which has been greatly increased during every paroxysm of fever. Fever every afternoon since 15th; chill to-day at 1 p.m.; fifth, sixth and seventh dorsal vertebrae very tender on pressure. 15 grs. calomel; blister to spine at night and quinine in the morning. There was no return of chill; the fever preserved a remitting form; and under the use of quinine in two grain doses, during the remission, with oil occasionally, the fever gradually became lighter and of shorter duration, until the 23d, when she was discharged. She continued well until the 29th; had a chill in the morning after a feverish night; saw her in decline of fever; found the third, fourth and seventh dorsal vertebrae, (examined by percussion,) exquisitely painful. Scarified and cupped the spine freely at 9 p.m., the fever having entirely abated. Ague on the morning of the 30th, at day-light, followed by fever, which declined in three hours. Tongue moist and but slightly furred, yellowish white; foul taste in the mouth; bowels open. Cups reapplied to spine, and enjoined rest and low diet; at night had high fever, with distressing pain in region of the spleen. October 1st.—In the morning without fever; eyes very yellow, and bowels confined. Prescribed three calomel and aloes pills, of 7 and 2 grs. each; one every three hours; these produced very black consistent discharges, and since the fever has ceased. Tenderness of spine still continuing, was discharged with advice to apply a blister thereto.

33. Sept 19.—A healthy young man, of active habits, has suffered a daily paroxysm of intermittent since the 16th, and has taken much simple cathartic medicine. The seventh dorsal vertebrae is sensitive, manifestly, on pressure. Declining the blister, the quinine relieved him speedily.

34. Sept. 4.—A negro woman, æt. 45. After three or four days of irregular feverishness, with loss of appetite, had chill to-day, followed by fever. Now great depression of spirits; frequent sighing and weeping; nausea; great oppression at the epigastrium; tongue thickly furred white; seventh, eighth and ninth dorsal vertebrae extremely sensitive. Copious draughts of warm water to produce vomiting, with sinapism to spine, soon relieved her most distressing symptoms. I saw her only in this emergency, in the absence of the family physician.

35. Sept.—A robust female of short stature, æt. 22; of regular habits and good health. She suffered four paroxysms of
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quotidian, of a malignant character; during the fever the whole of the limbs remained cold, and the hands red; the pulse very rapid and compressible; great oppression of epigastrium; laborious, hurried respiration; great anxiety and thirst; tongue dry; warmth gradually returning to extremities at the end of paroxysm, when the pulse became more full, but always very compressible. She was blistered on the spine; took large and repeated doses of calomel, with quinine in 4 gr. doses, during the imperfect remissions, with blisters successively to spine, legs, stomach and arms; and after the bowels were opened by the calomel, morphine in 1-8 gr. doses, every two hours during the fever. After these four paroxysms, the reaction became general in the next paroxysm of fever, which was without chill on the 28th; took no more quinine, still complaining of great oppression of epigastrium and hurried respiration. 28th and 9th, took 40 grs. of calomel in divided doses, with morphine after its operation. 30th, 5 p. m.—Skin very hot, with exception of the fingers, which are cold, the ends extremely cold; pulse 128 undulating, full, very compressible; tongue rough and dry; blister to spine well, sufficiently to allow examination by percussion; light percussion as well as pressure of the first to fourth dorsal vertebrae produces instantly a hacking cough—which is renewed by every examination—and at intervals of two or three minutes, was frequently repeated. Examination with stethoscope discovers respiration natural; two scarifications on spine, and cups applied for half an hour, drew about 2 ozs. blood. Before the cups had been on ten minutes, the fingers were as warm as other parts of the surface; at the end of the operation, expressed a sense of relief to the distressing oppression of the epigastrium. The night was passed generally in quiet sleep, without anodyne. October 3.—Distress in stomach still continuing, was cupped and blistered at the epigastrium on the 2d, and bowels opened by oil; and to-day is much relieved; asks for some nourishment and is impatient at its delay. Discharged on the 6th convalescent.

36. Sept. 28.—Negro boy, 3t. 8. Is represented to have had fever every afternoon and night since the 25th, without chill; has taken oil; at 8 p. m. to-day, skin universally hot; tongue heavily furred, yellowish white; pulse frequent but soft; frequent sighing and spasmodic breathing when awake; head confused on being waked up; second, third, sixth and seventh dorsal
vertebrae exquisitely painful on pressure; which produces grievous complaints, and increases the difficulty of breathing; oil; blister to-night on decline of fever, and quinine in morning; 2 gr. doses. 29th, 10 a. m.—Many stools; blister drawn; has taken four doses quinine; has no fever. This patient in the afternoon was removed to his owner's house and passed from my care.

37. Sept. 26th.—A boy of 10 years, with large head and exercised brain; has had remitting fever for three or four days; has taken oil, which has operated but slightly. 7 p.m.—Head-ache, ear-ache, flushed face; pulse 100, full and compressible; skin hot; lips very red; tongue furred, brownish white and moist; breath offensive; slight uneasiness at epigastrium on pressure; second, third and seventh dorsal vertebrae very sensitive, the patient shrinking from pressure and percussion. 16 grs. calomel in two doses, followed by oil in the morning, with blister plaster at bed time to spine and quinine the following day, arrested the fever.

39. A female of delicate constitution, about 30, nursing an infant of six weeks old. Had cholera morbus on the 22d, from some improper article of diet, and fever at night. After the operation of 15 grs. calomel, taken in three doses, on the 23d had fever at night. During morning of 24th, took five grs. of quinine, and in the afternoon and night had a paroxysm of fever, with most distressing nausea and vomiting, and excessive arterial excitement; the nausea was relieved by peach-leaf tea. After this, the bowels being kept open by magnesia, the quinine being taken freely during the remissions, the paroxysms gradually became lighter until the 30th., when she was discharged. The paroxysm every other day was much more violent. The tongue was perfectly clean throughout. Examined twice, the dorsal spine was sensitive. This patient experienced the greatest relief from the use of ice during the fever.

40. Oct. 1.—Laborer, æt. 40, of intemperate habits, but robust and healthy. Fever at noon of the 29th; 30th, nausea and vomiting all day; fever at night; this morning ague at day-light. Fever now declining; violent head-ache; tenderness of epigastrium; tongue much furred, yellowish white; no stool to-day. The lower cervical vertebrae, and five or six upper dorsal, and fourth and fifth lumbar vertebrae, very sensitive on pressure and percussion. No other medicine at hand, took 20 grs. calomel.—Blister plaster six inches long to spine; quinine in 2 gr. doses to-
morrow. Medicine operated freely, and in the morning was entirely free from fever, taking quinine without inconvenience.

The foregoing are not selected cases; but they are all, the particulars of which I have recorded, within the above named dates. Besides these, I have memoranda of other cases of fever, simply with respect to the presence or absence of this particular spinal tenderness, viz. : Seven cases of remitting fever in which it was present; two in which it was absent; and four of intermittent, present in all. I cannot forego the satisfaction of adding the two following observations furnished me by my friend, Dr. Joseph Milligan, illustrating so conspicuously the influence of spinal irritation in remitting fever, and the happy consequences of directing the treatment to its reduction.

“Bob, a stout negro fellow of 24 years, was attacked with remittent fever, about the middle of June, 1836. When I saw him, about twenty hours after his attack, his pulse was full, strong and hard (about 100 in frequency,) and the tongue was red and furry. He complained of great pain in the back, intolerable headache, and the conjunctiva was much reddened by the fulness of its vessels. He had taken a dose of castor oil before I saw him, which had operated, without relieving him in any degree. I bled him from the arm immediately, in a recumbent posture, (a severe vertigo preventing him from sitting up,) and was surprised to see him faint from the loss of not more than three or four ounces of blood. I prescribed twenty grains calomel, which was followed next day by a dose castor oil. No other medicine than the oil was given on that day. But on the next, finding no abatement of the head-ache, nor other change for the better, in this condition, I bled him again as he lay in bed and had his feet plunged in hot water. Again he was about to faint, when no more than three ounces of blood had been drawn, and I stopped the flow. I was perfectly at a loss to conceive, how under the existing excitement of the brain, syncope should follow so light an abstraction of blood; for on former occasions I had bled him, and he stood pretty large bleedings very well. The pain in the back was so great that he could not turn himself in bed but with great effort; and he chose the supine posture as affording the greatest relief to the spine. I resorted to a variety of means to mitigate his sufferings for two days longer, at the expiration of which time he
did not seem to be a whit the better for all that I had done for him. It now occurred to me that it would be well to examine the spine, for the purpose of discovering whether or not there were any tenderness, in any part of the column. I commenced at the back of the neck, and seizing each vertebra successively by the spinous process, moved it laterally with a slow but firm motion, until I arrived at the lumbar region. He did not experience any pain during this operation, until I had reached the first or second lumbar vertebra, as well as I remember, when he shrunk in great pain, from beneath my hands; and as I repeated the examination at the sensitive spot, to be assured of the condition of the parts, he cried out that the motion gave him great pain, "very severe." I scarified the skin deeply on each side of the process of the vertebra affected, and succeeded in drawing, probably, two ounces of blood. The part was then covered with a sinap'ism, which was allowed to remain there for a half hour. In a few hours the pain in the back and head-ache were gone. Next day, the tongue began to clean off; and in forty-eight hours he sat up, comfortably. From this time his convalescence was rapid.

Mrs. ———, in the seventh month of her pregnancy, was exposed to a shower of rain on the 4th July, and a week after, was attacked with remittent fever. The exacerbations, as usual, occurred at noon, and the remissions towards morning. The stomach was irritable during the progress of her disease, and only ceased to be so, when she became decidedly convalescent, but the tongue was soft and almost clean, and exhibited none of the appearances which we are accustomed to see, in most cases of gastric excitement. The matter vomited was generally a depraved bile, often bearing a striking resemblance to the acet. copper, in colour. On the first day of the attack, there was considerable head-ache, which was promptly relieved by a moderate bleeding. She was treated with calomel, followed by laxatives pro-re-nata. After the removal of the head-ache, no local pain was complained of, until about the tenth or twel th day, in the forenoon, when she suffered severely from a pain in that region of the right side, comprehended between the mamma and the last of the false ribs. A sinap'ism over this part did not mitigate her suffering in the slightest degree; and as there was no reason to believe, from existing circumstances, that the liver was specially
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implicated, the vertebrae were examined, for the purpose of determining the condition of the spinal chord. At the third dorsal vertebra, a good deal of soreness was experienced by the patient, upon pressing its spinous process. A sinapism was applied over this part, and its action on the skin was followed by the instant departure of the pain in the side. It recurred however, in the evening, as the sinapial excitement diminished. The part over the vertebra affected, was then freely scarified, and an ounce or two of blood extracted by cupping. This operation was succeeded by immediate, complete and permanent relief.

The fever began to abate soon after; and had not the condition of the uterine system kept up a certain degree of irritability, the patient would undoubtedly have experienced no further inconvenience from fever. She was perfectly restored to health on the 10th August.

J. M."

It thus appears, that of these forty cases of intermitting and remitting fever, this tenderness on pressure, of some portion of the spinal column, was present in all, but four cases of remitting fever, viz.: Nos. 3, 15, 22, 39; and in two cases of intermittent, viz.: Nos. 9 and 20; but of these, however, one was arrested by a blister to the spine, without other means used, but dieting; and the other was modified materially, in its character, in like manner. Although I would not presume to estimate the degree of influence of the topical applications to the spine, when used conjointly with other remedies of acknowledged power in these diseases, still we cannot but conclude, from the very conspicuous relief afforded by them, in many of the cases, when used alone, that in the other cases they must have exerted no inconsiderable influence; and I think I am warranted in the assertion, that under this treatment, the cases of intermittent were more promptly arrested, than they generally are when treated with quinine alone.

On the statement of these cases, with so remarkable uniformity of this one symptom, the first question which naturally presents itself to the mind of every one, is—Have the observations been justly made? Not implying any suspicion of the honesty of the observer; for strangers shall account him honest, upon the general consideration, that he is a member of an honorable pro-
fession; but he may have been deceived—his method of examination may have been defective—pressure of the skin between the finger and any bone, may produce pain and uneasiness. I therefore state particularly the mode of examination. Commencing at one or other extremity of the column, I press with an equal degree of force, directly upon each spinous process, calling the attention of the patient forcibly, to the degree of uneasiness felt upon the application of the finger to each point, and begging him to compare these sensations together; where practicable, as it is in the majority of cases, depressing the skin on each side of the spine, as low as possible by the thumb and finger, so as to include the spinous process between them, and move it alternately, in one and the other lateral direction. But the most satisfactory mode of examination is by mediate percussion, to which I was led by the desire to examine the vertebrae, over which a sinapism or a blister had been recently applied, and produced an inflammation of the skin, thus rendering the examination by pressure, manifestly improper; because the results could not be fairly compared with those obtained by pressure upon other vertebrae, over which the skin was entire. The medium I have used is the middle finger of the left hand; placing the ball directly upon the process, and making the impulse upon the nail, with the middle finger of the right hand. I say upon the nail—thereby conveying the assurance, that the impulsive force has not been unduly violent. I would here suggest the caution, not however by way of heightening and magnifying the importance of this subject, but from a conviction of the practical importance of the suggestion, that this percussion be made upon each vertebra at first, very gently, for in many instances, the distress to the patient produced by it, is extreme. Other media might be suggested, but I consider the finger superior to every other in this respect, that we judge with the most unerring exactness, when the impulse is and is not communicated directly to the whole vertebrae; and if we discover that it is applied obliquely, with the most perfect ease we can, by varying slightly the position of the finger, accomplish our object. Another advantage of this examination by percussion, I have already hinted at, that it may be accomplished even upon a recently blistered surface.

Another question naturally presents itself—what is the force and value of this symptom?—whence this uneasiness?—what
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does its existence indicate? Certainly not that the skin at these particular points is sore and tender; I have endeavored carefully to verify this fact, by taking it up between the thumb and finger and compressing it with more force than was applied by the direct pressure; uniformly receiving the assurance of the patient, that the uneasiness was of a different character from that produced by pressure upon the bone. But if this might be the cause of pain, in the method by pressure, it cannot be in that by percussion; for it is well known to those who make use of mediate percussion, that it may be employed freely, even upon a blistered surface, without producing pain. It as certainly does not indicate that the bone itself is tender and diseased; for we cannot conceive why pressure upon a diseased bone, should be followed by sighing, coughing, increased oppression of the precordia, nausea and faintness. It is as unsatisfactory for the same reasons, to attribute this symptom directly, to a diseased state of the ligaments of the vertebrae.

Having thus excluded these three parts from any participation in the production of this phenomenon, we next enquire—Can it proceed from a diseased state of the dura mater lining the bony channel? We answer unhesitatingly, that the symptoms above referred to, developed in distant organs by the examination, cannot arise directly, from an inflammation or any degree of irritation of the dura mater, for reasons assigned already; but we can conceive very readily, how the dura mater, being in a swollen state, might produce such symptoms, by compressing the origin of nerves supplying these distant organs, when an unusual degree of motion is communicated to the vertebrae by percussion. But we perceive that this unusual motion of the vertebrae would produce the same degree of pressure, if the dura mater were in its normal state, and the substance of the chord itself enlarged.—We therefore must, necessarily, adopt the conclusion, that this phenomenon indicates a diseased state, either of the medullary substance of the spinal chord, or of its investing membranes. I am not prepared to infer from these few cases, that this local affection of the spine always exists, nor that it is the primary irritation upon which these fevers depend; but if subsequent observations shall establish the uniform existence of this spinal irritation, at the commencement of intermitting and remitting fevers, it will confirm the opinion now almost universally held by the
profession, of the local origin of all fevers, and the equally universal persuasion, that this location is in some part of the nervous system.

I shall barely, in conclusion, suggest some considerations calculated to raise the presumption at least, that this local disease may account for many of the phenomena of these fevers.

First. I consider it established beyond all controversy, both by direct facts and reasoning, that rheumatism is of spinal origin. Without entering into any particulars, I take great pleasure in referring to an article on this subject, by Dr. Dugas, in the first number of the Southern Medical and Surgical Journal.

Second. Ordinary colic is uniformly attended with the evidence of spinal irritation, and I am ready to assert from my own experience, that more conspicuous relief is obtained in this distressing affection, from topical applications to the spine, than from any other mode of treatment.

Third. Colica Pictonum, it is certain, is not a disease of inflammation at the seat of pain, for it is treated with success by the most violent and drastic cathartics—a course well calculated to aggravate the disease, if it depended on local inflammation. On the records of La Charité, there are more than five hundred cases treated in this manner, and five fatal cases—in neither of which were there but slight traces of local disease in the bowels; and two in which there was a collection of fluid in the arachnoid of the spine, and in one of these, softening of the dorsal portion of the marrow. In the record of these cases, no mention is made of examination of the spine during their course, this mode not then being in use. M. Andral establishes the conclusion, that this disease depends upon lesion of the spinal marrow and abdominal plexus of the great sympathetic, and that the constipation depends either on paralysis of the muscular coat of the intestines or suspended secretion of intestinal mucus.

Fourth. Asthma—This affection for 3 years past, I have found almost constantly, accompanied with spinal tenderness, and promptly relieved by cupping and blisters.

Fifth. I can apply the preceding remark to Hysteria, with its almost infinite variety of symptoms.

Sixth. The records of medicine, recently, contain many cases of intermittent neuralgia in distant parts, co-existing with spinal irritation, and promptly relieved by topical applications to the
spinal column. I refer to two conspicuous cases in Teale's work on neuralgic diseases.

Seventh. The same work contains cases in which pulsations in the epigastrum, tightness across the epigastrum, great muscular debility, disorder of the secretions, palpitations, tremors, flatulence, pyrosis, &c. &c. &c., existed simultaneously with the evidence of spinal irritation, and were relieved by its treatment, even when there was reason to believe, they were accompanied with a diseased state of the sympathetic gauglia.

These considerations, shewing the intimate connection in particular cases, between spinal irritation and diseased function of almost every tissue in the body, together with the fact of the intermittency of those diseases called nervous, are calculated I say, to raise the presumption, that the phenomena of these intermitting and remitting fevers depend upon a local or general diseased condition of the spinal marrow.

If this local affection of the nervous system does exist in these fevers, can the fact be established by autopsic examination, and why has it not been thus ascertained before this? I answer that possibly, in this way the fact of this disease and its nature may be revealed, by the dissection of subjects that die of casualties, while in the early stage of these fevers; but it is very obvious, that the absence of organic lesion of this portion of the nervous system, in cases fatal after a protracted course, is no evidence whatever against its existence at their commencement; because, on the presumption that the most distinctive, characteristic feature of these affections, their intermittency, depends upon this local irritation, it would be unreasonable to expect to find it, after the fever had lost this character—universally the case, as it advances towards a fatal termination. Again.—These fevers are treated by some practitioners, with drastic cathartics, by others with repeated doses of calomel, on the belief of their hepatic origin; both we suspect, relieving this local affection, on the principle of revulsion; in the same manner, it may be, and no doubt is resolved by the predominance of serious affections of other organs arising in the course of the fever. My limits will not allow to add but a single illustration of this principle. How often do we see gastritis existing in fever, so unequivocally, that the judicious practitioner withholds all active and irritating medicines from the stomach, and uses his utmost endeavors to arrest it, believing that
upon its reduction depends the safety of his patient—we see this gastritis often, relieved in the course of twelve or twenty-four hours, by the development of bronchitis—so entirely cured, as to permit the free use of antimonials, to overcome the bronchitis; but if this patient should die of suffocation, from bronchitis, who expects to find organic lesion in the stomach? Will the practitioner doubt the fact of the previous existence of gastritis, from its absence?

I must add on this subject, the declaration of M. Andral, that in fevers called essential, there is no nervous symptom but may be manifested without appreciable alteration of the brain and its appendages.

I have so far transgressed the limits assigned me, that I add but one or two remarks on the treatment of these fevers.

In the first place, we infer the propriety of the early use of revulsive applications to the spine; leeches, cups, sinapisms or blisters—one or other of these, according to the well established principles regulating their use.

If this affection of the spine be the original irritation upon which all the other phenomena of intermittent and remitting fevers depend—which determines their individuality—then we may with the more confidence, at their commencement, make free use of cathartic medicines in general, and particularly of calomel, a medicine of so much power in correcting the disordered secretions of the abdominal and thoracic organs: for instead of being deterred from their use, by the apprehension of exciting inflammation in the stomach and bowels, already exhibiting functional derangement, this pathological view will sanction their use, to accomplish a two-fold intention—to relieve the original affection, by their revulsive operation, and to remove the congestion and those depraved secretions of the abdominal organs, which are generated by every paroxysm of fever—which consequences, if long neglected, may determine a pathological condition of these organs, and destroy the periodicity of the fever.—

So far from being led to a treatment directed only to the spinal column, to the exclusion of ordinary modes, we consider this legitimate deduction from the pathology we have suggested, of the highest practical importance.

The unvarying experience of nearly two hundred years attests the efficacy of Peruvian bark and its more valuable, refined, mod-
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ern preparations, in the treatment of intermittent fevers; this view of the general similarity of the pathology of intermittents and remittents, suggests the early and liberal use of quinine in the latter form, even in the face of the objection, that the diseased condition of some of the organs, (constituting the very difference between these two forms) forbids it; regarding this state dependent on the original local nervous irritation, it suggests, that it is far more prudent to run the risque of increasing the succeeding paroxysm, than to leave this original focus of irritation unattempted by this heroic remedy, so likely to reduce it; for this once subdued—the paroxysmal return of fever dependent on it, prevented—the disordered state of the organs may be more safely corrected, afterwards, by appropriate remedies. It thus confirms a practice formerly more in vogue here, than at present, the value of which was attested by the experience of our predecessors.

ARTICLE V.

Remarks on the use of Quinine in Bilious Fevers. By D. Hooke, M. D.

1st. The instantaneous and certain cure of intermittent and remittent bilious fevers, depends upon promptitude. The proper remedies should be applied as soon as the attack commences. There is no danger except in delay or improper treatment.

2nd. They are ushered in with lassitude, stretching, aching of the bones, chill or ague. For these symptoms, nothing is necessary but warm drinks and warm applications; but when to these, there are added, anxiety, restlessness, great distress about the stomach, or retching and vomiting, and inequality of the circula-
tion, indicated by great heat on the forehead and stomach and little or none at the extremities, then besides warm teas, warm applications and frictions, mustard plasters, and these very large, should be applied over the stomach, and if the symptoms are very urgent, on the extremities also, and kept on until they produce a deep scarlet redness in the skin, which they will usually do, in from fifteen to thirty minutes. If this redness disappears after they have been removed, they should be reapplied. As soon as the redness remains permanent, the danger for that paroxysm is over, because the circulation has been equalized, and the dangerous congestion thereby overcome or removed. In addition to the foregoing, I would suggest, in very alarming cases of collapse, the extensive use of frictions with red-pepper and salt.

3d. After this cold, comes the hot stage, or what is properly called fever. If it be the first paroxysm, and the patient formerly of good health, a dose of castor oil, or if this is not at hand, one of calcined magnesia and epsom salts combined, should be given to cleanse the stomach and bowels, and aided if necessary by injections—one of the best is a table-spoonful of salt in a pint of warm water. To this course, add diluent and cooling drinks, and if the excitement is very great, occasionally bathe the hands, face and feet, with cold water. A towel wet with cold water may too, be laid over the stomach. If it be a second paroxysm, or if the disease be still further advanced, or if the patient labored previously under some bilious affection, a dose of calomel, followed in three or four hours by one of oil, is to be preferred to the oil alone.

4th. When the fever has gone off by perspiration or otherwise, quinine, the true remedy for these affections, should be given in one, two or three grain doses, every hour, until at least fifteen or twenty grains have been taken, if the patient be an adult. It may be given in solution or in pills—in any way, so it is given, and that largely. I have in very alarming cases, given it in five grain doses every fifteen minutes; and have seen it thus given, even restore to health, those who were supposed to be dying.

No remissions of fever should be suffered to pass without the quinine, even if purgatives have been neglected during the exacerbation of the fever.

Injections, however, should be used in a case of this kind, as...
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an important adjuvant, and also in cases of great irritability of the stomach. Sometimes the quinine does not set well on the stomach, even after the bowels have been evacuated, in such a case a mustard plaster should be applied over that organ.

5th. The above course may always be pursued, and will always cure, if commenced before the disease has continued long enough to produce local inflammations; but when these take place, they must be subdued before the quinine would be admissible. But as there is no necessity for this state of things, if the above treatment is pursued, I will not now take room to say how it should be remedied.

6th. Should a remission be so short, that quinine could not be given in sufficient quantity to arrest the disease, the cold and hot stage should be treated again as above advised—preferring calomel as the purgative, and as soon as the remission is again apparent, commence with the quinine. Let it only be remembered, in order to induce every one to give the minutest direction all due attention, that these fevers, which can be thus so easily arrested, destroy more human life than any other whatever.

7th. The quinine does no lasting injury—it sometimes produces a ringing in the head, some giddiness, and occasionally a little deafness, all which disappear in a short time, generally in a day. To compensate for these temporary evils, it cures without any waste of flesh or strength, or constitutional energy. This ought to be constantly remembered.

8th. The drinks throughout the attack should be of the mildest kind, such as water, toast water, gruel, chicken water, rice water, or the like. Every thing heating and irritating should be carefully avoided; and so also, should all drastic purgatives, narcotics and blisters. Drastic purgatives never fail to do mischief, and narcotics and blisters so seldom, that they should never be used in these fevers, except under the advice of an experienced physician.

9th. Occasionally, after the fever is cured, the patient continues to feel dull and disinclined to action—here the diet should be light, and the bowels kept moderately open until these symptoms disappear,
Part II.—Reviews and Extracts.

Hæmorrhoids.

We are much pleased with the remarks of Dr. Salmon of London, on this important subject. Of all the diseases that afflict human nature, there are few more common, attended with more suffering, or followed by more disastrous consequences, yet there is none oftener neglected, or treated on erroneous principles or no principles at all—empiric nostrums and patent remedies, being the means generally resorted to for relief, until too frequently irreparable injury has been sustained.

"A just consideration of the causes of any disease, (says Dr. Salmon,) will be our best guide not only to prevent its occurrence, but likewise as to the method of treatment we should adopt for its removal or alleviation; let us therefore briefly enquire into the causes of piles.

Various as these will be found, they all tend towards the same results; viz. deposition in the cellular tissue, which unites the mucous and muscular tunics of the rectum; distention of the minute vessels of its mucous coat, and more or less enlargement of the hæmorrhoidal veins. Piles may therefore be produced by any circumstance, constitutional or mechanical, which preternaturally excites, or mechanically obstructs, the circulation in these particular parts. Thus they not uncommonly arise from an injudicious perseverance in the use of peculiar or violent purgative medicines, or excessive bodily exertion, particularly horse exercise; hence, also, results the prevalence of the disease in persons accustomed to a sedentary mode of life, the warmth excited from the constant sitting position of the body promoting an inordinate action in the vessels of the lower part of the rectum; while the want of proper exercise induces a torpid and confined state of the bowels, in a great degree assisted by a deficiency in the biliary secretion.

I believe the disease is often caused, or much increased, from the fashionable, yet pernicious custom of sitting upon chairs having hair or stuffed seats. Persons, especially those whose occupations are of a sedentary description, should accustom themselves to use chairs, the seats of which are composed of cane, formed into a net work.

The soft blue hæmorrhoidal tumor, which may be said to be the true pile, will always be found in conjunction with an enlarged, or otherwise diseased condition of the liver, which circumstance is physiologically explained, when we consider the immediate connection that exists between the vena portae and the hæmorrhoidal veins. From this cause, these veins will sometimes become distended to so great a degree, as to form tumors of a very considerable size; and I have seen an instance, in which from extreme enlargement of the hæmorrhoidal veins, the fore-finger could not be introduced into the rectum beyond the first joint; the patient was likewise the subject of fistula in ano.

Another effect of irritation in the rectum is, that coagulable lymph is from time to time thrown out upon the inner coat of the intestine, but more particularly in the cellular tissue which connects the mucous and muscular portions of the bowel. This deposition organizes and gradually increases, till at last a huge mass of superstructure is formed, which is productive of extreme annoyance and exquisite suffering.

But another and extremely prevalent cause of the disease will be found in a
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contracted condition of some part of the rectum, which causes an accumulation of faecal matter in the bowel; this necessarily irritates it, and sooner or later produces ulceration of some portion of its mucous surface; while the perpetual straining which accompanies the desire to relieve the bowels, the result of the accumulation, injects the minute vessels of the intestine, distends, and finally causes them to rupture; from which sources arises the haemorrhage, more or less experienced by those who are subject to piles. Now it is not always judicious, suddenly to correct this effect, for although it is a diseased action, it, not unfrequently, is the mode by which nature relieves herself, and it thus, perhaps, prevents the formation of a more serious disease.

Dr. Salmon's observations on the treatment of piles, are not less philosophical and judicious—as they are too concise for farther condensation and too valuable for any omissions. We will present them to our readers in his own words.

"This, (the treatment, says Dr. S.) in a great measure, must necessarily depend upon the cause from which the disease arises. Should it be connected with any hepatic affection, we of course principally direct our efforts to restore the healthy state of the liver. Surprising relief will often be imparted from the loss of four or six ounces of blood at intervals repeated according to the discretion of the medical attendant. This may be taken either from the arm or by the application of cupping glasses to the region of the liver; the latter is, perhaps, the most preferable mode. The application of leeches to the orifice of the bowel is a valuable remedy, in those instances when the tumors are situate within the sphincter; but when they are external to it, I have often found that more irritation is produced from the bites of the leeches than benefit from the quantity of blood which they abstract. Not unfrequently they induce great tumefaction of the parts, which seriously aggravates the patient's sufferings. But in the cases of internal piles, especially those which are attended with any hepatic disease, the use of leeches will be found of great service, for they not only diminish the general volume of the blood, but, by unloading the vessels at the inferior portion of the alimentary canal, operate more immediately upon the affected parts.

I have lately been in the habit of puncturing that description of pile which is almost wholly produced from distension of the haemorrhoidal veins, with the acupuncture needle; by this method some ounces of blood may be abstracted, which will afford instantaneous relief to the patient. This plan may be adopted almost ad libitum by the medical attendant, and is entirely free from that apprehension of real, or imaginary danger, which by some is considered to belong to dividing these veins with the lancet; which latter practice I have often adopted with great service; neither have I ever found any untoward result from it. Furthermore, I am acquainted with an individual who was in the habit of performing this operation on his own person, a practice which, notwithstanding its successful issue, cannot be too strongly reprobed.

Evaporating washes* are of service, not only by alleviating the inflammation in the piles, but also that irritability of the sphincter which almost invariably accompanies the disease, to a greater or less extent. I prefer using these in a tepid state, for when they are applied cold, patients are oftentimes not sufficiently cautious respecting their use; either from inattention, or dislike to the momentary feeling produced from the application of cold, they permit the linen rag to get dry; hence an increase instead of a diminution of the local action ensues.

* I have been in the habit of using the following formula:—Recipe, Spirit. Rorismar. 3 ii.; Aqua Am. Acet. 3 iv.; Mist. Camph. 3 x.; Misc. Fiat lotio.
A gentle stimulus by an ointment applied to the sphincter twice or thrice in the course of the day, will, in the milder attacks of the disease, not uncommonly be of essential benefit;† this plan will not, however, agree with all constitutions, and should therefore be adopted with caution.

The administration of medicine forms a most essential part of the treatment of the disease. It is well known that particular drugs, as for example aloes, exercise a peculiar action upon the intestinal canal; such description of medicines are therefore to be avoided; large doses of any kind of purgatives adopted as a habit are improper; nevertheless, as the disease is often connected with extreme costiveness, it is best at the commencement of an acute attack, to give a brisk dose of medicine, so as fully to unload the intestinal canal, and by such means facilitate the progress of the circulation through the rectum. In the milder forms of the complaint, the bowels may be kept regular by the use of small doses of castor oil, the confection before described, milk of sulphur, or any mild, aperient.

The use of enemas, when the situation of the tumors admits of the ready introduction of the pipe, ought never to be omitted; they not only lessen the local irritability of the parts, but sometimes, by removing the feculent collections in the intestines, supersede the necessity for any kind of aperient medicine. All violent exercise, particularly riding, must be abstained from. These, together with a reasonable attention to diet, constitute the principal features to be observed in the ordinary treatment of piles. With the most cautious attention, however, the disease will not unfrequently progressively increase, till at last we are compelled to relieve our patient’s affliction by the means of operative surgery; and this brings me to the next division of my subject, viz: the removal of the Hæmorrhoidal Excrescence.”

Dr. S. has not mentioned two remedies, which we have found most beneficial in those cases of piles accompanied with hepatic disease, and which we believe is a very frequent association in southern climates.

We have long been convinced that one of the most usual causes of hæmorrhoids, was the obstruction opposed to the free return of blood from the hæmorrhoidal veins, through the portal circulation, and that our curative efforts should be directed mainly and primarily to the liver and portal system. In our hands no remedial means have proven more efficacious in removing portal engorgement, and restoring the liver to its healthy condition, than calomel or blue pill and the external use of nitro-muriatic acid. We do not object to any of the remedies proposed by Dr. S., we would only recommend the occasional employment of mercurials and nitro-muriatic acid, in chronic and obstinate cases.

After discussing at some length the question of the removal of hæmorrhoidal tumors by excision or ligature, arraying the principal authorities in favor of each plan, and summing up their respective advantages and disadvantages, he gives most decided preference to the former.

The succeeding paragraphs are too important to be passed by.

"I can only say, that I have for many years been in the habit of performing the operation by excision, and that with the most perfect success; occasionally, I have had to encounter hemorrhage; but never, save in one instance, to such an extent as to endanger the life of the patient. I am inclined, therefore, to believe, that when bleeding ensues to any material extent, the tumors are accompanied with an enlarged or otherwise diseased condition of the liver, with stricture of the bowel, or such an unhealthy condition of the constitution, as may give rise to an hemorrhagic disposition in the vessels at the lower part of the alimentary canal; and, in the neglect of the due observance of any of which circumstances, not only the danger, but the unsuccessful issue of either description of operation is very likely to originate.

And here I think I should be guilty of no inconsiderable dereliction of duty, was I to omit adverting to the careless manner in which these tumors are frequently removed. Not only are the causes of the disease altogether lost sight of, but its extirpation decided upon without the slightest degree of constitutional preparation; indeed, were we to judge from the observations delivered in some of the medical schools of this metropolis, it might reasonably be supposed that the excision of piles was an operation, altogether so simple, that it might be performed at the convenience of the surgeon or his patient. More than once have I known fatal results to arise from this mistaken confidence, this injudicious, not to say rash proceeding; which, though it may be practised perhaps many times without any untoward result, is certain eventually not only to end in the compromise of the surgeon’s reputation, but in what is of much greater moment, the loss of human life.

Prior to the removal of the hemorrhoidal excrescence it is the duty of every surgeon carefully to survey the various points to which I have alluded; and, above all, cautiously to examine into the condition of the rectum; for, in the early stages of piles, where the disease is accompanied with any contraction of the bowel, we shall often be able to mitigate the former by the removal of the latter; I have seen many instances which confirm this observation."

Extracts from the Note-book of a Physician of this City, during his attendance on the Parisian Hospitals.

Sub-cutaneous Fibrous Tumours.—Mr. Dupuytren entertained the class this morning on a case truly interesting, and illustrated his observations by the performance of an operation, trifling in its nature, but important in its results. The patient is a woman, fifty-five years of age and of a good constitution, who experienced for the first time, about two years ago, slight pains in the right thigh, which in five or six months became very severe. The pains were irregularly paroxysmal. She observed that the pain always commenced in a certain part of the outside of the thigh, and from thence radiated, as it were, to the knee, the hip, the glutæi muscles, the pubis, &c. Her sufferings were
always greatest at those parts than at the place of their origin, and were excruciating. She consulted a physician, who, on examination, perceived a small tumor beneath the skin, and situated at the spot from whence originated the pains. He applied poultices, leeches, blisters, &c., in vain. The disease was not in the least subdued, and the tumor had been concealed by the tumefaction of the surrounding parts, reappeared as soon as this was removed. She continued thus in torment until this morning. Last week she was admitted into the hospital, and prepared by baths, laxatives, &c. for the operation, which consisted merely in the extraction, by a small incision, of the little tumour. This was no sooner done than she said she was completely relieved, and felt only the sensations occasioned by the incision.

The tumor when examined, was found encysted in condensed cellular and adipose membranes. This envelope being removed, exposed a body of a globular form, of the size of a horse bean, of a white color, and of a fibro-cartilaginous texture. When dropped on the floor, it bounded like a piece of gum elastic; according to Mr. Dupuytren's observations, they generally rebound about two inches for each foot of elevation. This enlightened and experienced gentleman, during the course of his lecture, related the history of several cases of this curious disease, all of which yielded as instantaneously to the operation. He saw the first case about twenty years ago, and since that about twenty-five more. He says he is the first who gave any account of it, and that it is always taken for rheumatism or tic douloureux, which it imitates very much. He had several opportunities of dissecting individuals who had these tumours, and as often made use of all his art in vain, to discover any nervous communication by which we might account for the great degree of pain produced by them. It yet remains with him a problem. He also mentioned, that when left to themselves, they degenerate into schirrous or cancerous tumours of the worst kind, and which return in despite of the surgeon's best effort to remove them by the knife. Observe that he uses the word "degenerate," meaning thereby, that until then, it was but a simple tumour and possessed none of the specific qualities of the cancer.

Case 2d. The patient is a married woman, of good constitution, and about 40 years of age. She has had since her childhood a small tumour, about the size of a pea, situated just beneath the skin and a little above the external ankle, which, however, never occasioned the slightest pain until the period of her first pregnancy, about five years ago. She says, that as soon as she became pregnant, (the first fortnight, to use her own terms,) she experienced a most excruciating pain, commencing at the tumour and radiating over the leg, and which, after continuing perhaps a couple of hours, would cease. These paroxysms oc-
curred two, three, and occasionally four times a day. She was not exempt from them at night, but they were nearly always produced by getting out of bed in the morning. This state of things continued until her delivery, notwithstanding the attention of several physicians of repute, some of whom, considered it rheumatism, others, an affection of a nerve that was not to be troubled, lest it should become worse. She now remained well during 18 months, after which time she again became pregnant, and was as soon reattacked by her intolerable pains. I should have mentioned that during the 18 months that she suffered no pain, she was always apprized of the approach of her menses by a sense of pricking or itching at the tumour. Her second delivery did not, as the first, free her of both child and pain, but left her still subject to her paroxysms, until about ten days ago, when Mr. Dupuytren extracted the tumor. She thinks it had almost doubled in size since her first attack. The operation has procured an instantaneous and radical cure.

**Cataract with Carious Teeth.**—An individual operated on sometime since for cataract, had at the time a carious tooth, which commenced aching a few days afterwards, since when chronic ophthalmia has supervened. Mr. Dupuytren says that he has seen at least fifty cases of this kind, and that the patient's mouth should always be examined, and carious teeth removed previous to the operation, for as soon as the eye is irritated by the knife, the tooth will become affected sympathetically, and by a kind of second sympathy, produce ophthalmia. As soon as the tooth is extracted, the ophthalmia disappears.

**Dislocation of the Thumb.**—This man, having made a false step, fell forward, and in endeavoring to protect himself with his hand, dislocated his thumb, so that the bone of the first phalanx was thrown on the dorsal side of its metacarpal bone. This accident occurred 23 days ago, since when, however, several efforts have been made in vain to produce a reduction. The patient, now admitted to Mr. Dupuytren's ward, was the subject of a very interesting dissertation on the causes of the great difficulties encountered in the relief of an injury, at first sight, so trifling. Mr. D. first stated that the dislocation of the thumb might take place in four ways, namely: with the bone of the phalanx on the dorsal, palmar, radial, or cubital side of its metacarpal bone.—In the two last cases there is scarcely any difficulty in the reduction, whereas in the two first this is almost always a very difficult task. Now, dissection has clearly proved to Mr. D. that the lateral ligaments are always ruptured in the latter, and very rarely in the former. This being ascertained, the cause of the great difficulty of replacing the bones in their natural position, is rendered quite evident, when we reflect on the shortness, the
thickness, the strength, and especially the inelasticity of the lateral ligaments of the thumb. In the natural state, the ligaments are in a direction parallel with the axis of the bones, whereas they become perpendicular to the axis so soon as dislocation on the palmar or dorsal surface takes place; hence it is evident that their length must be diminished by this kind of twisted position. Besides this difficulty, must be overcome that produced by the head of one bone slipping behind that of the other. This last consideration caused Mr. D. to deviate from the ordinary methods adopted for the reduction of such cases. He therefore takes hold of the thumb, and, acting on it as a lever, throws it back so as to bring the phalanx perpendicular to the axis of the metacarpal bone, and at the same time causes traction to be made by the means of a ligature placed at the proximal end of the phalanx. So soon as the traction has brought the head of the bone of the phalanx sufficiently forward, the reduction is completed by a sudden flexion of the thumb, until now kept drawn back.

In the case of the young man alluded to, he tried this method for some time, but just as he was about to succeed, he perceived that considerable excoriation had been produced, and thought it would be imprudent to continue any further efforts until this was cured. But, the next morning (to-day) it was perceived that reduction was nearly complete, and that nothing more was required but a splint and bandage. Mr. D. did not attempt to explain how such a change could have been produced spontaneously, but merely observed that it was an evidence of the superiority of his mode of proceeding over all others.

On measuring, this morning, the length of the thumb that has been dislocated, and comparing this with the length of the unaffected thumb, they were found to correspond exactly, so as to leave no doubt of the reduction. Motions of flexion and extension can now be executed with but little pain comparatively.

Schirrous Mammary.—Mr. Dupuytren disapproves very much of the use of leeches and compression, to affections of this nature, as only tending to deteriorate the patient’s system and to allow the disease to become more inveterate. He says, that it is not the size of the schirrous that is diminished by these means, but merely that of “its atmosphere,” to use his expression; that is to say, of the surrounding tissues that have become swollen by the irritation its presence causes, and that whenever the pressure and use of leeches are suspended, not only these tissues swell again, but the schirrous enlarges with increased rapidity. There is now in his ward, a case that has been submitted to that treatment, and for which he will have to use the knife.
Notice of Lisfranc’s Clinics.

In the October number of this Journal, we were favored with a continuation of the valuable “Extracts from the Note-book of a Physician of this City, during his attendance on the Parisian Hospitals.” It will be found by reference to that number, that it contains under this head, much of the unpublished practice of M. Lisfranc, one of the most eminent surgeons of the French metropolis. Much of this matter is new, and all of it, on subjects too much neglected; both in instruction and in practice. In a note to that article, we promised some remarks on one of the topics; of which promise we now purpose the fulfilment; together with some notice of the rest.

The paramount object of this Journal is usefulness to the medical profession, and through it, to the cause of humanity. Whilst therefore, we feel thankful to the friend who has been so obliging as to furnish us with liberal extracts from the notes which his most commendable zeal and industry have accumulated, and trust they will continue to enrich the pages of the Journal, we may remark, that they are given as a faithful account of the views, instructions, and practice of some of the first practitioners and teachers of the day. And whilst they serve the purpose of informing the profession, of the views and practice of such persons, as a matter of medical intelligence, they cannot, emanating from such a source, fail to be of great utility to those of the profession who have not been favored with the opportunity of witnessing the same themselves.

But we are not of those who are disposed to think that every thing which is brought from afar, is to be valued according to its distance, and the cost of procuring it. Nor are we willing to adopt the opinions, or practice of any man; however loudly the trumpet of fame may have sounded his name, unless such opinions or practice be found not wanting before the lawful tribunals of truth, reason and propriety. Gold is not precious according to that by which it may have been mineralised, or the country from which it came; but according to its intrinsic purity; nor do the richest stones produce the most. It is often found alone, or mineralised by clay and sand. A Georgia or a Carolina specimen then, if it stand the furnace of purifcation as well, will make as fair an ornament, and as rich a treasure as that of South America or of Ophir. But the unwary are too apt to be deceived by the glare of a reflected hue; or to receive as gold, that which is made to shine by the hands through which it has passed. In America, where we have learned to put crowns and sceptres under our feet as little toys,—where indeed, we contemn them, and where mere merit may ascend to the highest honor, we are
becoming capable of receiving into our hands the productions of men, as those of mere men; not with the wildness—the intoxication of menials when condescended to by their superiors, but most soberly, and tamely, as freemen; independent alike, of all the trammels of authority, and the honors of knighthood: And when we receive them, we can sit down to their contemplation and examination, as a mere thought which had been presented to our mind; and this too, with a consciousness that we stand between humanity and error—the protectors of the former and the expositors of the latter.

The teacher, the notes of whose instruction are now before us, has long since deservedly been before the world as an eminent surgeon. His practice in many cases has been detailed in the journals of the day, and much of it has been valuable. But the more eminent his rank, and the more influential his name, the more closely should his movements be scrutinized.

We have however, occasionally found, as we have thought, most insuperable objections to some of his capital surgery. For instance, his proposed improvement on amputations, offered to the world some 12 or 15 years ago, which consisted in allowing the wound made by an amputation to remain open and exposed to the atmosphere for a few hours, in order, the better to secure adhesion. We felt bound to object, without ceremony, to the propriety of this practice, on the ground of its cruelty to the patient; especially when the same end, (i.e.) the suppression of the ooze of blood from the small vessels, might be most perfectly accomplished within ten minutes, by the application of a solution of the sulphate of alum, or of zinc. In evidence of the truth of this, we are able to state, that so long ago as 1812, we amputated the thigh of an adult immediately below the trochanter minor, secured but two arteries by ligatures, and suppressed all other discharges from the wound by the application of a sponge with a solution of alum, so completely, that although the wound was closed and dressed for adhesion within fifteen minutes after the bone was sawn, the wound never discharged enough of blood, serum and pus, to wet through the ordinary dressing. On the fifth day, the dressing was removed down to the adhesive strips, which were left. On the eighth, these were removed, and the wound found most completely united; and by the twelfth, the ligatures having passed away and their places healed, the patient was discharged. But we hasten to notice M. Lisfranc's practice in some of the diseases of the uterus.

The first topic in that part of his clinique now before us, is a sketch of female anatomy, which he seems to think necessary as a guide to the student and practitioner, in the examination by the speculum. These remarks are well enough for those who are already possessed of a good knowledge of the special anatomy of the parts.
The next topic treated is the "introduction of the speculum uteri:" — "For the introduction of the speculum, the patient should be placed in the same position as if she were to undergo the operation of lithotomy, save that her hands are not to be fastened to her feet, nor ligatures applied. The legs, or rather knees, are to be held by two aids, if admissible; if not, the feet must rest on chairs of an equal height with the bed—the back horizontal, &c."

We are compelled to dissent entirely from M. Lisfranc's plan of introducing the speculum uteri; and we are forced to the conclusion, that nothing could have suggested such a plan, or retained such a man as Lisfranc in its continued use, but a kind of generalizing in practice, and entire disregard of delicacy in female practice, but too common in hospitals, and which cannot be too strongly repProbated. Certainly M. Lisfranc never gave a thought to the additional afflictions of the female, which never fail to be added by the unnecessary wounding of her modesty. The exposures which their necessities unavoidably demand are severe, and nothing can justify an unnecessary extension of them in any instances. Even the fact of the inmates of public hospitals being often persons of loose morals, does not justify the practitioner in allowing the least unnecessary exposure. But in view of the convenience and the utility of the speculum examination, we have, ever since our first attempt, adopted the reverse position to that of Lisfranc; and we venture to say, that if the practitioner will place his patient on her knees, with her breast and head on a pillow, and the abdominal muscles preserved in perfect relaxation, he will find neither difficulty nor danger in the introduction of the instrument, or of mistaking any other part for the os uteri. In this position, if the natural, or any considerable mobility of the uterus remain, so soon as the os externum is dilated, and the air passes into the vagina, instead of that fullness which prevents the easy introduction of the instrument, and continually presses the folds of the vagina before it, a large space is often formed, of several inches in every direction; extending from the vestibule to the os tincæ, and from one side of the vagina to the other, large enough to contain a man's fist; and with some, as large as a child's head at term. The uterus will generally be found to have passed from the vagina, and strait of the pelvis to its greatest elevation, in the direction of the axis of the superior strait: and if it have not done so, it is easily caused to do so by the pressure of the fingers in that direction; the reader will at once perceive the great safety of the os uteri from being easily wounded by the speculum, and the great facility to the free motion of the inner part of the instrument, in the large space thus afforded by the vagina proper. Even its walls may be freely inspected by changing the direction, or by partially withdrawing the instrument.

In cases of great immobility of the uterus, the advantages of
this position are not so conspicuous—still the convenience in every way, is a decided improvement on that which Lisfranc's position affords. Lastly, in this position it is perfectly convenient to perform this examination without the exposure of any portion of the external surface of the patient; or any part whatever, except the precise point of inspection—a thing impossible in the plan of Lisfranc. For this, the manner of using the speculum is, in the first place, to clothe it with a piece of calico or other light cloth of ordinary width, and two yards long, by passing the speculum two thirds or three fourths of its length through a small hole made in the cloth about half a yard from one end. The cloth is fixed to the speculum at this place by a string, if necessary, then reflected over the large end and handle, and the body of the instrument properly greased. The instrument is then passed under the cover, to the vulva, and is easily introduced after gentle dilatation with the fingers of the other hand. So soon as it is introduced, (which should be in the direction of that part of the axis where the small end is at all times,) the short end of the cloth is spread over the sacrum and back of the pelvis, and the long end over the thighs, legs and feet, so as completely to cover the woman. The sheet or blanket with which she will have been hitherto covered, may now be removed, and the internal parts to be inspected, fully exposed to view. The speculum should be the simple tube speculum; the inner surface of which should be kept in good polish. "A candle, of course, must be used," said Lisfranc. This is not a thing "of course." No candle or taper of any kind is necessary in the day-time; the reflection from the instrument being sufficient to display the part as fairly as the palm of the hand at noon-day.

M. Lisfranc has advised that touching be practised before the introduction of the instrument, in order to determine the precise position of the os tineæ; as this part—the common subject of the examination, is often turned downward and backward. Now in M. Lisfranc's position, it is barely possible that the os tineæ can be inspected in these cases. It will be found no very easy matter to rectify this uterine displacement in this position, which the reader of the fifth number will remember, is on the back; on account of the general fullness and pressure of parts which are afforded; and against which, the elevation of the uterus has to be made. If corrected by the touch in this position, the uterus most commonly follows the fingers as they are withdrawn, carrying the vagina in transverse folds before it, which constantly impede the introduction of the speculum, and obstruct the view. In the position herein recommended, all pressure and fullness are taken off; and the uterus most commonly restored to, and retained in its proper place, at least during the continuance of the position. Moreover, the uterus is carried so high in the pelvis that there is no danger—barely a possibility, of touching it by the means of the inner end of the speculum.
In the next paragraph, M. Lisfranc gives the "general symptoms of uterine disease." Under this head he has given us most of the symptoms by which we may be led to apprehend uterine disease.

We conceive there is not a class of diseases, the clear diagnosis of which is more important than that which includes the various uterine affections. The importance of these diagnoses does not stop at the accuracy necessary merely for the purpose of correct prescription. This is an interest common to all diagnoses. But such is the relationship of the uterus and its functions to the female economy, that many of the most serious secondary troubles and dangers are often, nay, almost certainly produced by the ill condition of one, or irregular or imperfect performance of the other. Amongst these we may name habitual abortions, exhausting leucorrhoea, barrenness, bronchitis, phthisis, chronic hepatitis, dyspepsia, hysteria, hypochondriasis, chloresis, bulimia, various affictions from spinal irritation, mania, chorea, general and obstinate disorders of the nervous system, colics, haemorrhoids, fistulae, &c. &c., any of which in the female, should direct inquiry into the condition and functions of the uterus. The importance of diagnosis extends in these cases to the delicate nature of these diseases, which, on this account, more than in any other diseases, should be made plain, and well defined by external evidence, before either examination, or operation per taxis can be justified.—In this class of troubles, it is always possible to locate the disease, if not to distinguish in every instance its specific character, previous to manual examination. Some of the symptoms named by M. Lisfranc, are certainly very foreign to the purpose of diagnosis; such for instance as "gastro-enteritis resisting ordinary means"—"pains in the spleen, without increase of size"—"pains at the umbilicus without any other symptom of disease." Whilst strangury, involuntary urination, pains in the direction of one or both of the lateral ligaments, dysmenorrhœa, leucorrhoea, hysteria, abortions without other obvious cause, &c. &c., should by no means have been omitted. His remark, that "uterine haemorrhage as surely indicates a diseased state or morbid tendency in the uterus, as hæmoptysis does that of the lungs," is most correct and important; not only for its truth as to the fact of disease, but its very sure testimony of actual ulceration of some kind, or that condition which consists in a serious tendency thereto. Of like value is that of (unnatural ?) "discharges per vaginam." And here should not have been omitted, all irregularities in the menstrual discharge; any and every deviation of which from the natural quantity, the rate of flowing, the ease, and the period of occurrence, may be considered to constitute.
PART III.—MONTHLY PERISCOPE.

Extracts translated for this Journal, from the Journal Hebdomadaire of 2nd September, 1836.

Parallel between the Treatment of Urinary Calculi, by Lithotritv and by Cystotomy.

The following statistics are derived from a review of the interesting work recently published by M. Civiale, on the relative success of the various methods employed for the removal of calculus deposited in the bladder. The value of such numerical statements must be obvious to all; they convey irrefragable refutation of the vain theories and opposition of the bigoted adherents to the use of the knife.

"Of 1915 patients subjected to Lithotomy at Luneville, at the Hétel-Dieu, and at La Charité, from 1729 to 1727, 374 died, say 1 in 5,12. 1335 individuals underwent the lateral operation in various countries, of whom 275 died, or 1 in 4,85. The Rectovesical operation, performed 157 times, proved fatal in 29 instances, 1 in 5,41. Even the Bi-lateral operation, the advantages of which have been so much exaggerated, does not present better results. M. Civiale had stated, in 1832, that out of 32 operations performed by M. Dupuytren, there were 8 deaths, 21 cures, and 3 imperfect cures; a mortality of 1 in 4. Subsequently, M. Dupuytren declared that he had lost only 8 out of 70 cases.—The discrepancy in these statements has been reconciled by the testamentary Executors of M. Dupuytren, and the correctness of M. Civiale's assertion established. In a table appended to the memoir recently published by them, it may be seen that in 42 operations, there were 9 deaths and 33 cures, or 1 in 42.3; but nothing is said of imperfect cures. It should also be observed, that among the 42 patients, 19 were under 10 years of age, and that there were 8 deaths among the 23 others. The same proportions may be deduced from the practice of several other surgeons of Paris.

"The results obtained by the Hypogastric operation are still less favorable. 173 cases, derived from a table published by M. Belmas and other sources, present 60 deaths, or 1 in 2,91.—It should be remembered, however, that this operation is seldom resorted to except under the most unfavorable circumstances.

"Now, with regard to Lithotrity, M. Civiale, in a table contained in his work, shows that of 506 persons who applied to him for relief, 307 were found proper subjects for Lithotrity, of whom 209 were cured, 7 died, 3 remained with cystic disease, and one was lost sight of. Let these facts be compared with those of Cystotomy."
“It has been asserted that the disease was more apt to return after Lithotrity than after Cystotomy. M. Civiale states, that among 88 patients subjected to the knife, the disease returned in 9, whereas among 244, on whom was practised Lithotrity, there were 14 in whom the calculi were reproduced.”

Method of detecting Pus in the Blood.

M. Donné read the following note to the Société Philomatique, at its last meeting.

The peculiar property that concentrated ammonia possesses of transforming pus into a glutinous and tenacious substance, might, to a certain extent, serve to distinguish pus from the other animal fluids, inasmuch as none of these are thus affected by this alkali. But this test cannot be applied to admixtures of pus with blood, for ammonia communicates to the latter some degree of viscidity. The only means by which M. Donné has been enabled to detect the existence of pus in the blood, are the following: He first examines the blood with the microscope, in order to determine whether it contains any foreign globules; if not, it is probable that the blood contains no pus; if, on the contrary, it contain globules resembling those of pus, it cannot yet be inferred that the blood does contain pus, for the purest blood, taken from individuals in perfect health, will occasionally contain a small number of globules difficult to distinguish from those of pus; but, in such a case, a drop of ammonia should be added to one of the blood. Should the blood be pure, all the globules will be dissolved, and no trace of them be perceived with the microscope. If, on the other hand, the blood contain pus, the purulent globules will not be acted on by the test, and may be detected with the microscope, for ammonia dissolves but very slowly globules of pus. M. Donné considers this the best method afforded by the present state of the science for detecting the existence of pus in the blood.

Animalculeæ in the Pus of Syphilitic Chancres.

M. Donné states, with regard to the existence of animalculeæ in the Pus of Syphilitic Chancres, that although he has never detected them in any other kind of Pus, he has uniformly found them in that of Chancres; also, that having inoculated with this pus the thigh of an individual affected with chancres, he examined the pus derived from the pustule produced by the inoculation, and found it filled with animalculeæ. He observes, that in this instance, the pus had not yet been exposed to the action of the air, being covered by the epidermis. M. Donné adds, that he
has not yet detected animalculæ in the pus of buboes. He has not yet sufficiently studied the form of these diminutive beings to determine it, but they appear analogous to the infusories. M. D. is inclined to consider these animalculæ, rather a medium of transmission of the syphilitic virus, than active agents in the contagion of this disease.

In a number of cases, the admixture of a little diluted vinegar with the pus of chancrecs, has sufficed to prevent the success of its inoculation.

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**Chances of Life.**

The following summary of statistics relating to the chances of life, is chiefly from the lecture of Dr. Robert Graves, of Dublin, on Medical Statistics.

It is stated and admitted as a general fact, that of a given number of children born in Ireland, one-third die before one year, one-half before the eighth year, two-thirds before the thirtieth year, and three-fourths before the fiftieth year. But such general facts are necessarily drawn from data in the mass, and averages like this include opposite extremes. For example, on Patrick's-day, 1782, nine students walked from Trinity College, Dublin, to Bulloch, where they dined. In 1833, eight of them were still alive, and it is believed, are to the present time, a period of more than 54 years. Again:—Of a certain company of grenadiers of 50 men, who served in the Irish volunteers in 1782, only one is now living. It is evident from these, that the above general conclusion as to the rate of life, can only be useful in point of political economy of life, and not a ground for estimate in life assurance. But if we carry the inquiry down to the physical causes influencing in each of these parties, we shall find instructive and useful facts in a medical point of view, and for estimate for life assurance.

It should be remarked, that the party, of whom 8-9 have lived 54 years, were students in Trinity College, and doubtless were dedicated to a literary life. The party, of whom only 1-50 lived the same time, (and indeed in the very same years, and country, so that there was no peculiarity of season or climate influencing in one case more than the other,) were Irish volunteers, subject to a very different course of physical influences. Here it is evident, that the physical causes peculiar to the different
occupations of each, are to be looked to, in the estimate of chances of life, and the cause of the difference in each.

Another fact of the same kind may be advanced. It is remarkable how long a certain set of men, holding the same office, often live in succession. It is believed that the steady policy of the imperial court of Vienna has been partly, at least, owing to the extraordinary length of time the modern prime ministers of Austria, including Metternich, have lived. A similar succession of longevity on the part of the rulers of Prussia, is believed to have aided other circumstances in aggrandising their territories.

Dr. Graves mentions the following as a calculation of the chances of life, approaching the truth.

The chances are equal that every healthy adult will live half the difference between his own life, and eighty-one. This, which is the mode of computation generally employed, is very near the truth. Thus, if a man is forty years of age, the chances are equal, that he will live half the difference between it and eighty-one years, that is, twenty and a half years; and therefore, that the duration of his life will be sixty years and six months.

The total number of male and female children brought into the world are very nearly equal, a small excess only existing on the side of the males. In Germany and England, the proportion of males to females is as 21 to 20; while in Ireland, it is generally as 21 to 19. The slight excess is, however, ultimately corrected by the greater mortality of the males before the age of puberty; after which the excess is slightly on the female side.

M. Giron divides individuals into different classes. The first consists of individuals whose employments tend to develop their bodily powers. He found that in this class, the number of male births exceeded the average proportion of male and female births throughout France.

The second class consists of those whose business tends to enervate. In this, the number of female births exceeded the average proportion of female to male births throughout France.

The third class consists of those whose employments are of a mixed description. In this, the proportion of male and female births was nearly the same as the average proportion throughout France. Hence the conclusion arises, that the pursuits of agriculture tend to the increase of the male population, and that the habits of commerce and manufactures favor an augmentation of the female population.

On the subject of the proportion of births to marriages, Dr. G. observes, that the fecundity of marriages, is not, as has been supposed, in proportion to the comfort and independence of the community, and that fewer children are not born from a given number of marriages, in countries which are deficient of agriculture, industry, and the blessings of civil liberty. In England, the proportion of births to marriages from 1800 to 1810, was as 4 to 1,
and from 1810 to 1821, as 4.22 to 1. In Scotland and Holland, it is as 4.2 and 4.20, while in Russia and several Italian States, it is as 5.25 and 5.45 to 1.

It is here observed, that in the degree in which a nation advances in prosperity and civilization, premature and imprudent marriages will become less frequent, and the number of births be proportionately diminished. The lateness of marriages should generally stand as a good test of an improved state of society, and as an evidence of the prevalence of reason and good sense over the otherwise controlling passions of mankind. Contrary to the generally entertained opinion on this subject, it may be given as a fact, having an important bearing in the estimate of the chances of life, and consequently of importance in the business of life assurance, that the cultivation of science and literature appears to be favorable to longevity. He who is chiefly engaged in mental labour, has a fairer prospect of length of years, than he whose occupations consist exclusively in bodily toil.

Of 104 Italian mathematicians enumerated by Franchini, the ages at which 70 died have been ascertained. Of these 70, eighteen had attained the age of 80 and two of 90; and this in a climate not generally considered favorable to longevity.

In France, 152 men of science and letters, have been taken at random—about half of them cultivated science, and the other half devoted themselves to general literature. The average life of these 152 was upwards of 69 years.

Longevity of female authors of the last century—from the Quarterly Review, No. 99:

| Lady Russel, | 87 | Mrs. Chapone, | 75 |
| Mrs. Rowe, | 63 | " Lennox, | 84 |
| Lady M. W. Montague, | 73 | " Trimmer, | 69 |
| Mrs. Centlivre, | 44 | " Hamilton, | 65 |
| Lady Hervey, | 70 | " Radcliffe, | 60 |
| Lady Suffolk, | 79 | " Barbauld, | 83 |
| Mrs. Sheridan, | 47 | " Delany, | 93 |
| " Cowley, | 66 | " Inchbold, | 68 |
| " Macauley, | 53 | " Piozzi, | 80 |
| " Montagu, | 81 | " H. More, | 89 |

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The average life of these literary ladies is found to be 71 9-20 years. The extremes are 44 and 93.

Out of 120,000 who insured their lives in the Equitable Insurance Office, the number of suicides in twenty years was only
fifteen. Countries and cities vary from peculiarities of circum-
stance—Dr. Graves thinks France affords five times the suicides 
that England does—that the Irish are the least suicidal nation in 
Europe, and that Dublin and Naples afford fewer suicides than 
any other cities. At the same time it may be remarked, that 
murders are in an inverse ratio. There were forty murders in 
Ireland for one in Prussia, and forty suicides in the latter, for 
one in the former.

It is believed, that there is no one fact entitled to more consi-
deration, in estimating the chances of life, than the temperance of 
a community, or an individual—no one circumstance more cal-
culated to limit or extend the longevity in a country, and conse-
quently in an individual. This is a truth, firmly fixed in the 
facts of the physical effects of excessive stimulation on the hu-
man organization, the moral evils which it entails, or with which 
it is associated, and of which it is at least a fair index, and the 
various accidents to which it is accessory, and which increase 
the chances of death.

When we consider the many diseases which are produced by 
any of the various intoxicating liquors, the various dangers to 
which the intoxicated state subjects the individual who is thus 
deprived of Reason and Judgment—his great protectors, and 
the increased fatal tendency which the habit of their use gives to 
most diseases, the fact of habitual use of intoxicating liquors 
alone, even supposing the external evidences of health to be 
good, should (cet. par.) enhance the price of the risk somewhere 
between five and ten fold.

Curious Case of a Wound Healing over an Extraneous Sub-
stance.

A letter to the Editors from Dr. Benjamin Ayer, of Columbia 
County, Ga., gives a well authenticated account of the extraction 
of the blade of a knife, from the nostril of a Mr. Murphy, on the 
14th July, 1831, where it had been left in an affray which oc-
curred on the 4th January, 1830, a period of more than 18 
months. Dr. Ayer found on examination, the lower end of the 
blade within the nostril, about 3-4ths of an inch from the apen-
ture. On announcing it, Mr. M. denied the possibility of such a 
fact; whereon, the doctor called in a number of most respecta-
ble witnesses, and proceeded to the extraction of the blade, which 
proved to be that of a dirk knife, 2 3-4 inches long and 3-4 of an 
inch wide at one end, and weighing half an ounce. It was found 
on extracting it, to have passed through the base of the septum 
posteriorly and extended laterally into the nasal cavities. The
external extremity was in the right nostril, and was seized by
strong forceps, and after several efforts, was removed from its
lodgment. The patient had made no particular complaint of it,
and was unconscious of its presence in the nose, until, as he
thought, he discovered an unusual bone on his nostril.

_Tincture of Copaiba._

The London Medical Gazette, gives us the following formula
for the preparation of a tincture of copaiba. Rub twelve ounces
of copaiba with six ounces of calcined magnesia. Digest this in
a pint of alcohol, filter, and add half an ounce of sweet spirits of
nitre. This is said to be the best form of administering copaiba.
The dose is one drachm twice or thrice a day; increasing if ne-
cessary, to two, three, or four.

_Emmenagogue Properties of the Aconite._—Dr. West of Soultz, extols, in an
article in the Archives Gen. the remedial properties of the Aconite in
amenorrhea, arising from chronic engorgement, or spasmodic condition of the
uterus. He administers the aqueous extract, commencing eight days before
the expected period of menstruation, in doses of one grain, and gradually
augmenting the quantity, until eight grains are taken daily at the ordinary

_Chorea._—The following mixture is said to have proved successful in the
treatment of this disease, but the quantity of the cyanide is too great for
most cases; it would be safer to commence with half the quantity, and in-
crease it gradually.

R. Tincture of Castor 5 ss.; Musk ——; Nit. Potass. aa. gr. iv.;
Cyanide Potassium, gr. ij.
To be mixed with eight ounces of orange flour water, and taken in spoon-
ful doses, in twenty-four hours.—_Am. Jour. Pharm._—_Bull. de Therap._

_Hydrochlorate of Quinine._—Dr. Spielman asserts, that the mu-
riate of quinine is a more speedy and effectual remedy for inter-
mittent fevers, than the sulphate. It is more soluble also than
the latter. The dose is from half a grain to a grain.—_Am. Jour
Ph._—_Jour. de Conn. Med._

The great solubility of this article, with even the same medi-
cinal virtues as the sulphate, should give it a decided preference,
for the practitioner would not be under the necessity of adding,
for its solution, a superabundant acid, as is commonly done for
the solution of the sulphate, whereby, as our observation informs
us, its virtues are impaired in a very appreciable degree.
Freezing Mixture—Prussic Acid.

Freezing mixture.—“Four pounds of pulverised sulphate of soda, (not efflorescent,) and three pounds of cold dilute sulphuric acid, (seven parts of strong acid to five of water, mixed the day before using.”—Am. Jour. Sciences and Arts.

This will prove a convenience in the distillation of Prussic Acid, when ice cannot be obtained for condensation. It is cheap, and always at the hand of the practitioner or chemist.

Prussic Acid should, from its unequalled power as a sedative, be ever ready to fill the prescription of every practitioner. But this can only be effectually done when it is fresh from the receiver. Consequently, the practitioner must, if he would avail himself of its benefits, unless he have a competent and willing chemist at hand, be always prepared for the distillation of small parcels of it. It is an article which deteriorates in consequence of many circumstances, and of none, with more certainty than that which is of all others most remote from our control, which is time. Were this article furnished fresh, and of a standard formula, to the practitioner, it would be to him at once, one of the most indispensable of his remedial agents. This we are fully justified in saying, by our extensive experience with it for many years.

Stimulus of Light.—Another most powerful natural stimulus, which has been generally overlooked, or underrated as a sanatory power, is light, or the direct rays of the sun. One of the most common causes of the loss of health, and the establishment of morbid irritability in the systems of children, females, students and mechanics, is living in the shade. Like plants, growing in similar situations, a large portion of those who do not labor in the sunshine, are feeble, pale and sickly. The solar bath, properly used, I am persuaded would more benefit a large portion of our patients than the best selected articles of materia medica.—Boston Journal.

Composition of Hygeian Pills.—No. 1. R. Gum. Aloes. ; Crem. Tart. partes equalis. Pills of common size. No. 2. R. Aloes ; Crem. Tart. a a \(\frac{1}{2}\) i. ; Gambog. and Colocynth a a \(\frac{3}{4}\) i. Pills of common size. Boston Journal.

Poisoning by Datura Stramonium, or Jamestown Weed.—An Irish family was taken suddenly ill, after eating a dinner of corned beef and boiled greens. The family consisted of five persons, Mr. T. his wife, and three children, the eldest about eight, the youngest about five years of age. I saw them about an hour after dinner, when the symptoms were immediately recognized as the effects of the Datura. The countenances had a wild idiotic expression—the pupils widely dilated—the sensorial functions perverted—and the muscular system subject to an irregular agitation somewhat resembling that of chorea. The appearance of the family was extremely ludicrous. The children were laughing, crying, singing, dancing,
On the Treatment of Croup by Sulphate of Copper. By K. G. Zimmer-
man, M. D.—The sulphate of copper was first recommended in croup by
Hoffmann, (1821,) who prescribed it in the dose of a quarter to half a grain
every two hours, and during sixteen years did not lose, according to his
own statement, a single patient. Serlo treated from forty to fifty patients
with sulphate of copper, and four only died: after venesection, he gave
three or four grains as an emetic; following this with a quarter of a grain
every two hours. Such was also the treatment adopted by Dr. Zimmer-
man, except that he generally applied leeches, and only bled from the arm
when inflammatory symptoms ran high. He gave the sulphate of copper
to fifteen children labouring under well-marked symptoms of croup; and,
although the disease in some was very intense, in others far advanced, only
two in the fifteen were lost.

Cases. 1. A boy, aged three years, was seized with symptoms of croup,
March 9th, 1830. He had had a cough and hoarseness for several days;
after exposure to a north-east wind, the symptoms became more severe,
and on the evening of the 9th respiration became "crowing." Twelve
leeches were applied to the neck, and a quarter of a grain of the sulphate
of copper, with sugar, was ordered every two hours. On the 10th, twelve
more leeches were applied in the morning. The danger increased, so that
in the evening the dose of copper was augmented to half a grain, and twelve
more leeches were applied.—11th. One grain of sulphate of copper was
given every two hours.—12th. The child died at nine o'clock in the even-
ning, on the fourth day of the disease.

2. A boy, six years old, seized on the 19th of March, took a quarter of a
grain of sulphate of copper every two hours, till, after repeated vomitings,
all the symptoms of croup disappeared on the 20th. On the 23d, the fifth
day of the disease, the boy was perfectly recovered.

3. A stout boy, one year old, was attacked by croup on the 4th of April:
leeches were applied to the neck; a quarter of a grain of Cupri Sulph. was
given every two hours, and although this was followed by vomiting every
time, eight doses were administered, when the respiration was relieved.—
The hoarseness gave way on the 13th, the tenth day of the disease.

4. A blond, scrofulous boy, aged three years, had an attack of croup on
April 13th: there was a sudden invasion of laryngitis, and the cough was
crowing rather than barking. Six leeches over the trachea, and a quarter
of a grain of Cupri Sulph. every two hours, were ordered: each dose ex-
cited vomiting, but the disease did not yield till the 15th, the fourth day.
The hoarseness continued till the eighth day of the disease, when the re-
covery was perfect.

5. A strong boy, four years old, seen at the commencement of the dis-
cease, recovered by taking the sulphate of copper, without previous bleeding.
The medicine was, as usual, followed by vomiting.
6. A lively boy, aged six years, seized in the night of the 27th of April, 1833, was not seen till the evening of the 28th, when the symptoms were very intense,—those of laryngitis and tracheitis combined. Venesection to three tasses, (cups), twelve leeches, and Sulph. Cupr., five grains, were prescribed immediately. At eleven o'clock, sixteen more leeches and a blister were applied; Cupr. Sulph., a quarter of a grain, was administered every two hours: the first powder was followed with relief. On the 30th, the third day of the disease, all the symptoms, except the hoarseness, were gone, which only remained till the ninth day.

7. The same boy had another attack of laryngitis on the 12th of January, 1834; he recovered, under the same treatment, on the 16th.

8. April 27th he had a slighter attack, cured by Cuph. Sulph. alone.—30th. He was quite well, and has not had another attack.

9. A weakly boy, aged six years, had been unwell a week, probably with measles; had a decided attack of croup on the 11th of October, 1833. On the 13th, twelve leeches were applied to the neck; four grains of the sulphate of copper were prescribed, and given afterwards in half-grain doses; in the evening, twelve more leeches and an emetic were prescribed. The Cupr. Sulph. was omitted on the 14th, and five of sulphur were prescribed, &c.; the copper was resumed in the evening. He died on the evening of the 15th, the sixth day of the disease. The trachea and larynx were examined: the mucous membrane was pale, soft, and a few of the vessels were injected; the bronchi appeared filled with a purulent mucous. A younger brother had measles five days afterwards.

10. On the 20th of April, 1834, (a year afterwards,) this brother, now four years old, had an attack of laryngitis. Leeches and the sulphate of copper were employed, and in a few days he was restored.

11. A red haired strong boy, four years old, seized with croup at 10 p. m. on the 23rd September, took the sulphate of copper, and had leeches applied twice: he recovered on the third day of the disease.

12. A delicate blond girl, four years old, had a sudden seizure of laryngitis, from which she recovered in twenty-four hours, after taking four grains of sulphate of copper.

13. A child, one and a half year old, recovered on the second day, after six leeches, Cupr. Sulph. four grains as an emetic, and a quarter of a grain every two hours, had been employed.

Dr. Zimmerman concludes that the sulphate of copper is a very valuable remedy in croup, particularly when conjoined with leeches and blisters.—Where there are bronchitis and tracheitis, calomel is preferable; but, in simple laryngitis, the sulphate of copper is advantageous in the majority of cases.—British and Foreign Review.—Hufeland & Osami's Journal.

Salutary Effects of Smallpox.—This case is related by Professor Lionello Polletti, of Ferrara. A girl had for a considerable time complete loss of sense and motion of the right leg, with permanent contraction of the right arm, which had been succeeded by what has been called paralysis agitans; all the usual remedies had been tried, but without success, so that she refused to submit to more, when she was seized (although previously vaccinated,) with confluent smallpox. She recovered, however, from the attack, which was very severe and alarming in all its stages, and at the same time lost the paralysis of the arm, and regained the motion and sensation of her leg.—Bullettino delle Scienze Mediche. Bologna. Febbrajo, 1835.