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EDITED BY

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"Je prends le bien où je le trouve."

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Thoughts on the Modus Operandi and Therapeutic Properties of Quinine. By James C. Harris, M.D., of Wetumpka, Alabama.

Believing that any thing in the least calculated to settle existing differences as regards the operation of a medicine so extensively used as Quinine is, in the treatment of Southern diseases, would be acceptable to the profession, has induced us to offer the following reflections, in support of the opinion that it is a stimulant and anti-periodic, and that it possesses these properties in an eminent degree, together with the power of neutralizing the malarial poison, or enabling the system to do so, or both, and that if it ever manifests very clearly any other action, it is either owing to idiosyncrasy, or to its having been given in unnecessary, if not dangerously large doses.

For the purpose of illustrating and sustaining these positions, we cannot but consider it a useless waste of time to inflict upon our readers a detailed account of the different varieties of the Cinchona bark, or the different quantities and diseases in which it has been administered, believing it necessary for our present purposes, merely to intimate further than what may be gathered from the following pages—that two of its elementary principles, Carbon and Nitrogen, during the round of the circulation in the lungs, under the vital forces, can, on strict chemico-physiological principles, be shown directly assisting in increasing the animal temperature and sensibility.
As regards the term sedative, Dr. Charles Caldwell observes,* "that when medical writers shall have learned, to deal more in matter, and less in mere words, unsanctioned by reason, we feel persuaded that the term sedative will be erased from the nomenclature of the Materia Medica. If the term, in common acceptsation, possess any meaning at all, a sedative is that which, diminishing or removing existing impression, diminishes or suspends existing action—if the impression be not removed, it is a law of nature that the action will continue. But how can a substance or agent remove from living matter an impression already in existence, or suspend or alter action already going forward, otherwise than by substituting an impression and mode of action of its own? Such a process is impossible. A stimulant impression inducing action is a reality: it must, when applied to living matter, act, and if it act, it must make an impression. This very action and impression, therefore, pronounce it to be a sedative only in name, not in fact; to be capable of acting and impressing, it must be a stimulant, impression being another name for stimulating action. But," continues the same writer, "to attribute to reputed sedatives the power of altering vital action in any other way than by means of impression, would be to assert an effect without a cause. In the strict sense of the term, a sedative is only known in the language of the schools."

Again, in speaking of the nitrogenized vegetable remedies, (of which quinine is one,) Prof. Leibig remarks,† "that when introduced into the system they augment the energy of the vital activity of one or more organs—they also excite morbid phenomena in the healthy body; and that all of them produce a marked effect in a comparatively small dose, and that many are poisonous when administered in larger quantity."

To the mind of almost any unprejudiced person, opinions so clearly expressed as are those just quoted, ought to be sufficient to establish the action of any particular medicine, or class of remedies. Still, to others more testimony may be necessary; and which, if we are not greatly mistaken, may be found in a well written article on the Poisonous properties of the Sulphate

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* Caldwell's Cullen, pp. 103-4.  † Organic Chemistry, p. 54.
of Quinine, by Wm. O. Baldwin, M. D., of Montgomery, Ala. In this paper, originally published in the American Journal of the Medical Sciences, for April, 1847; we are of the opinion that Dr. Baldwin has performed for science an acceptable service; and although many of his conclusions are based on results flowing from the inordinate administration of the remedy to dogs and puppies, they are, nevertheless, from the known similarity of its effects on man and animals, (established by himself and other experimenters,) entitled to no inconsiderable weight, and are, as given by Dr. Baldwin, as follows:—"Restlessness generally preceded all other symptoms, as was indicated by the animal changing its position often, and constantly moving from place to place; vomiting, or in those cases where the oesophagus was tied, efforts to vomit succeeded; purging was noticed occasionally, but in no instance except where the medicine was taken by the stomach; then came on muscular agitation or tremulous movements of the body and extremities, with a constant motion of the head—in attempting to walk, the dog would totter from side to side, and fall, or if he maintained his feet, would walk in a direction different from the one he seemed to desire. When under the full operation of the poison, the power of locomotion, or even the power of standing in the erect position, was lost altogether—the extremities apparently completely paralyzed. This state was accompanied with more or less excitement of the vascular system—the pulse increasing in frequency, and varying from 110 to 160, and in one instance even as high as 240 per minute—great oppression of the breathing was present, and sometimes frothing at the mouth. The pupils of the eyes were invariably dilated, and generally to an enormous extent, leaving but a small ring of the iris perceptible, and vision, as well as could be judged, was entirely lost. Convulsions was observed in every case (except one) which was watched to its termination, where the dose given was sufficient to produce death, and in one or two instances where the medicine failed to produce this result, furious delirium was present—in one case, as was manifested by the dog barking and biting at every thing about him—sometimes a profound coma would ensue, accompanied with slight muscular agitation, slow and heavy breathing, terminating in death in a very few minutes.
after the poison had been taken, and in a few instances the subject seemed as if stunned by some sudden and powerful blow, or violent fit of apoplexy."

The post-mortem appearances, as given by Dr. Baldwin, were equally uniform with the symptoms before death, and consisted in a "dark fluid and defibrinated condition of the blood, and congested state of the parenchyma of the lungs, resembling very much red hepatization. The vessels of the membranes of the brain were engorged—so also were the liver and kidneys in a few instances. The stomach and bowels were vascular and highly injected in patches. The membranes of the spinal cord were also more or less vascular, and in one instance, a semi-fluid coagulum of blood was found in the upper half of the theca vertibralis; this was probably owing to the subject being very young, and the convulsions being much more violent and frequent than in any other instance."

Had we have been required to detail a series of symptoms, and post-mortem appearances, resulting from the inordinate administration of some undeniable stimulant, we must confess that we should have been somewhat puzzled to have arranged a series, that would have placed the matter in a much clearer light. But on this subject we will let Dr. Baldwin speak for himself, who continues—"evidences too palpable to be denied, and gathered from experience with it as a remedy, prove to me that it is occasionally a stimulant. These experiments go far in confirmation of that fact, at least upon the healthy economy, and without attempting to offer any explanation for the apparent conflict of the two statements, I will simply repeat that I have seen it on the contrary, have, on innumerous occasions a most decided and unmistakeable contra-stimulant effect." Now, with what gentlemen have seen on other occasions, we, at present, will have nothing to do; but by what particular process of reasoning, with the facts before him, (in any thing less than dangerously large doses,) Dr. Baldwin could have arrived at such a conclusion, we are entirely at a loss to determine, especially when we recollect that he had previously declared that the remedy had been detected in the urine, and that it entered and mixed with the circulating masses of the body, and through this means, when given in quantities sufficient to destroy life,
exerted a direct influence on the nervous system of an eminently excitant character (nature). Neither do we believe, and indeed, were it necessary, think we could very easily show, that its good effects in his cases of Menengitis, where he also informs us that the attending circumstances were of such a character as to contra-indicate the use of the lancet, and other depletory means were derived from other than the contra-stimulant effect of the remedy.

Upon this subject we were both taught, that it was not credible that an agent of any description, would radically change its own nature, and be at all times, all things, unto all men; then if this be true—and to the correctness of which we are not sensible that any exception exists—we are driven to account for the apparent difference of action of this remedy on other principles than that of its sedative properties. To illustrate: we receive a gentle charge of Electricity, and are momentarily excited—continue, and gradually increase the charge, and we remain excited; but suddenly increase it to the strength of the terrible thunder-bolt, and we are instantaneously destroyed. Now will any one contend that all these different effects are the result of a change in the nature of the agent; we think not, the evidence is too palpable. Again: were we so disposed, we would show that similar results, by increasing the quantity, might be obtained from the administration of brandy, or any other alcoholic drink.

But were any thing more necessary, than what has been already advanced, to establish the stimulating properties of the remedy, or could we really esteem it necessary to bring forward more proof on a subject so perfectly plain, and defensible, we know perhaps of no other, in which these properties, together with its anti-periodic virtues, are more clearly shown, than in the power it possesses of warding off and preventing the return of the cold stage of an intermittent, and in which the smallness and weakness of the pulse—the paleness and coldness of the extreme parts, with the shrinking of the whole body, sufficiently show that the action of the heart and larger arteries, for the time, are greatly weakened.”

* Cullen's description of an ague.
In fact, its therapeutic powers are more wonderfully displayed in preventing and relieving any undue sanguineous accumulations that may occur during the persistence of any grade of autumnal fever—provided the accumulation be of a periodic character, and the result of an existing weakened action of the heart, or perverted nervous action, than in almost any other diseased condition of the system.

In view of what has been already advanced, together with an examination of the experiments and observations made with this article by Mellier, Duval, Berandi, and others, we think it may be clearly inferred that in a large majority of instances, in both animals and man, many, if not all of its most prominent effects in doses varying from 5 to 100 grains, are nothing more than such as would naturally flow from the administration of many other stimulants, and that whenever it fails to give manifestations of this character, in untoward symptoms, and prostration, it is owing to idiosyncrasy, or causes unnecessary here to be mentioned.

We also learn, from the same sources, that, as a general rule, larger quantities may be given to man, without producing its toxicological effects, than to animals; also, that it appears to increase vascular activity much more powerfully and with greater certainty in dogs, than in man: when swallowed by the former, it seems almost invariably to vomit, which fact is in direct opposition to our experience with it in man—hundreds taking from 12 to 18 grains daily, for several days in succession, without ever experiencing or complaining of the slightest nausea.

Then, if the position be correct, that the action of quinine on man, in small, medium and large doses, is to a considerable extent stimulant and anti-periodic, can it, we ask, on any thing like rational principles, or with any reasonable prospect of beneficial results, be given at all, in stages of excitement, unless very clearly marked with paroxysmal remissions? We think not. On this subject, we find ourselves sustained by the able editors of the Southern Journal of Medicine and Pharmacy,* Messrs. Gaillard & De Saussure. These gentlemen, once believers in

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the necessity and perfect safety of 20 and 40 grain doses, to be given between the paroxysms, have been induced, from some experience worth while with the remedy, to modify the practice. They now employ much smaller doses, and always give these during the greatest remission.

On this subject, we will here, once for all, remark, that it has only been, in remittent fever, and after the patient had been for several days under what we esteemed efficient, well directed treatment, and where the remissions were clearly marked, with an evident tendency to a solution, that we have ever derived any very decided benefit from the remedy, and then but seldom. Although we have, under such circumstances, but seldom succeeded in cutting short the febrile stage, we have never observed, in any thing like safe doses, its administration change the character of the disease, or produce any other effect than an aggravation of all, or a greater portion of the symptoms. That larger doses, under such circumstances, do aggravate all the symptoms, and might possibly change the character of the disease, substituting in its stead its toxicological effects, we are not disposed, or at present prepared, to deny; neither are we permitted to doubt that the action of the remedy is sometimes materially modified by idiosyncracy—also, by the particular type of the disease, and season of the year; but so far as regards that great want of uniformity of action, we would be induced to believe from the articles of different writers in our medical periodicals, our experience has not furnished us any very well grounded reason to complain, either as regards constitutional peculiarity, or size of dose, with from 4 to 6 grains of an unadulterated article, repeated every one or two hours, until 18 or 20 grains has been given, during the period of apyrexia, has, almost invariably, in our hands, given its stimulant and anti-periodic properties, sufficiently strong to ward off, in our autumnal febrile affections, the approach of the cold stage of an ordinary intermittent; that larger doses (10 grains, repeated every hour, until two or three are given) are sometimes given, and frequently administered with safety and advantage in the malignant intermittents of Southern latitudes, we are not disposed to doubt—with us it has, and still continues to be a favorite practice, and one that we think the success of which
will withstand the severest scrutiny. No one, we apprehend, will pretend to deny, that during the febrile stage of a large majority of our autumnal fevers, there are evident remissions and exacerbations; then, if quinine, as a general rule, has been given by some in these stages with anything like its vaunted good effects, it must have been owing to its anti-periodic and not to its contra-stimulant qualities. We wish to be understood, in the above expression, as meaning to say, that in this character of cases, we do not think it impossible that its anti-periodic properties might not be displayed in such a manner as to destroy the periodicity of the disease, and the patient suffer no material inconvenience from its stimulating effects; but as yet the practice rests on too insufficient evidence to justify its general adoption. We might here, with some propriety, urge many other reasons against this plan of practice in the continued type of fever—one we will mention, and only one, and by no means the least inconsiderable is the desire they beget on the part of their advocates for the exclusive and foo indiscriminate employment of the remedy, to the neglect of other, safer, and, we believe, better plans of practice—even granting that febrile action can in this way be suspended, breathing the same atmosphere, and surrounded by the same remote causes that first produced the disease; and the vis medicatrix nature being unable to remove existing internal derangements. As soon as the remedy ceases to act, what else but a recurrence could be expected. We think that an organization in health that would be unable to resist successfully deleterious impressions, would be but badly prepared to do so, when greatly debilitated by previous disease; and laboring under functional derangements of so grave a character as we know exist in fever, and which much experience has satisfied us are not to be removed, either alone, or by the combined action of the powers of the system, and this remedy—we are almost certain that we have seen more pale faces, oödematous limbs, and dropsical effusions, the result of this exclusive plan of treating fever, than from nearly all other causes combined. The question here very naturally arises, if large doses, as is contended for by some, possess the power of depressing the action of the heart and arteries, from what quantities are these effects to be expected; are we to look
for them in 20 grain doses? We answer, No!—this quantity has been tried, and found to produce very unpleasant effects—such as raising the pulse from 78 to 105 beats in the minute, pain in the head, and hot, dry skin. Then are they to be found in 70 or 90 grain portions, or divided, and run up in the course of eight or ten hours. To these quantities, again we answer in the negative. Doses of these sizes, and under these modes of administration, have been shown by the observations of Baldwin and Briquet, to have produced most alarming symptoms, and even death. Lastly: are we then, for the purpose of producing, in the opinion of its advocates, this desirable condition, to administer it in the doses of Dr. Bazire? We hope not.

Refusing, then, to our opponents, all that they may desire to claim in this particular for their harmless and powerful remedy, by denying that there is, or probably ever will be, an ascertained dose, and mode of administration, from which contra-stimulant effects may, as a general, ever be expected to follow, without serious risk of producing some one, or all of its toxicological effects, and for which, when they do make their appearance, in the shape of intolerable pain in the head, dimness of vision, heat and burning in the precordial region, with restlessness, heat of surface, and greatly accelerated pulse—we would advise the immediate suspension of the medicine, cold affusions to the head and surface, with morphine, as the remedies in our hands that have proved most serviceable;

Having compressed and finished our remarks, in as small a compass as it was possible for us to do, and remain intelligible, we leave the further consideration of the subject, for those who seem to experience so little difficulty in relieving the system of "bile,* with remedies that do not evacuate in any sensible manner."

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* See New Orleans Medical Journal, May No. 1847. page 753.
ARTICLE XXXI.

An Essay on the applicability of Crude Mercury to Ileus, and its kindred affections, with Cases. By Henry H. Meals, M. D., of Marietta, Georgia.

Notwithstanding this remedy has been occasionally used by physicians for several centuries past, and at one time enjoyed much popularity with the practitioners of England, it seems now to have been almost entirely excluded from the list of curative agents. If the author of this essay, by a simple narrative of the cases in which he has successfully used Quicksilver—some of them too presenting very alarming features—can induce the profession to employ this remedy, in a class of diseases always grave and frequently fatal, his object will have been fully accomplished.

Case I. June 16th, 1840.—A girl, æt. 8, had been attacked with Remittent bilious fever six days previously: she was treated, by the overseer of the plantation, with the usual remedies, without benefit, up to date, when I was called to see her. The case presented the following symptoms:—Head pretternaturally warm; extremities cold; considerable stupor; when roused, complained of pain, upon pressure, about the umbilical region; pulse, small, feeble and frequent, running 120 per minute; bowels constipated, no evacuation from them since the first day of attack.—Ordered fly blisters applied to the nape of the neck, and on the legs; to be given internally, croton oil, gtt. i. every two hours during the night.

17th. Blisters drew well; less stupor; pulse slightly improved; no evacuation, although croton oil gtt. x. had been administered; abdominal pain increased. Continue croton oil internally, and had rubbed over the epigastric region gtt. vj; hot poultices, etc. applied over the region of pain.

18th. No particular change—ordered crude mercury 3i. every two hours, until 4bj. was administered, or the bowels evacuated. Owing to an unusual number of engagements, I was obliged to leave the administration of the mercury to the overseer, and did not see the patient again until late on the evening of the 19th inst. At this visit, I found her unobservant
of surrounding objects, except when roused, when she still complained of pain in the abdomen; muscular prostration very great; pulse, small, feeble and frequent. The overseer had declined giving the mercury, thinking, as he declared, that she must die. I gave immediately crude mercury 3 iss., which operated in less than half an hour, producing, one hour thereafter, a decided improvement in all the symptoms. Ordered at 9 p.m. calomel grs. xv., to be followed in the morning, should it not produce two or three free evacuations, by castor oil.

20th. Calomel operated well; stupor relieved; pulse 100; pain in the abdomen absent, though there was some tenderness upon pressure; appetite voracious. Ordered, sulphate quinine grs. ij. every two hours during the day, gruel and chicken soup occasionally; calomel to be repeated at 9 p.m.

21st. Two bilious and consistent evacuations from the bowels; muscular strength greatly increased; pulse 90; appetite good. Continue quinine during that and the following day.

23d. Patient convalescent.

Case II. August 20th.—A gentleman, æt. 35, convalescent from a violent attack of congestive fever, in which he was severely salivated, and from which he had not wholly recovered, consulted me, after two days free indulgence of his appetite, for constipated bowels, attended by slight febrile symptoms.—Ordered, castor oil 3 i. at bed time, and hot mustard foot-bath.

21st., 9, a.m. No evacuation from the bowels; pulse 90; slight pain, upon pressure, in the lower part of the bowels. Ordered, castor oil 3 ij. to be given immediately, enemata, containing castor oil, every hour. 9, p.m., no evacuations; occasional vomiting; great restlessness; pulse 95. Ordered, croton oil gtt. ij. alternated with opium gr. i. every hour; enema comp. gruel water 1 pint and comp. ext. colocynth 3 iss., to be repeated twice during the night should no passage follow its previous employment.

22d., 9, a.m. No evacuation from the bowels; pain violent, pulse 110; vomiting frequent; great restlessness; patient much excited by forebodings of approaching death. Ordered, castor oil 3 iss. and spts. turpentine 3 iss.; enemata to be repeated every hour during the day. 9, p.m., no evacuation; pulse small, frequent and feeble; great restlessness; pain in the ab-
Meals, on Crude Mercury. [July,

domen greatly increased; stercoraceous vomiting. Ordered, sulph. morphine gr. ss. (in pill) every two hours, until quiet was produced, or grs. iij. were administered; blisters (flies) over the region of pain; attempted to pass a stomach tube through the anus into the bowels, with the intention of throwing, through the tube, enemata into the bowel; after passing the tube about 10 inches, I was forced to desist, from meeting with an unyielding obstacle—the enemata were however thrown up to this point.

23d., 9, a.m. No evacuation; slept a little during the night; took morphine grs. iiss.; pain greatly increased; extremely restless; vomiting frequent; pulse 130; blister drew well.—Ordered, crude mercury 5 iss. every hour until lb iss. had been given: enemata continued. 9, p.m., no particular change in the symptoms; took crude mercury 1 iss. Ordered morphine gr. ss. every two hours until quiet or sleep was produced; took during the night grs. ij.

24th., 10, a.m. Bowels evacuated a few minutes previously, in which evacuation the mercury was apparent: four passages followed during the day, producing much improvement in the symptoms.

25th. Slept well without opiates; pulse 100; muscular prostration great; some appetite. Ordered, salicine grs. ij. every two hours during the day; arrow root, occasionally. Discharged convalescent five days afterwards.

Case III. A grocer, of rather robust appearance, though addicted to alcoholic drinks, was suddenly attacked, on the afternoon of the 18th March, with the following symptoms:—Irritability of the stomach; occasional vomiting; cramp of the abdomen and muscles of the limbs; coldness of the extremities; pulse, hard and strong; tongue, loaded and rather dark; skin, dark-yellow; bowels, constipated; no evacuation during the two preceding days. Ordered, venesection 3 xvi., calomel xx., opium grs. ij., to be repeated every two hours; if restlessness and pain continue, during the night; fomentations, over the region of pain, of cloths squeezed out of hot vinegar and water; sinapisms to the extremities; enema with castor oil 3 ij.

19th, morning. Pain much increased; no evacuation; restlessness increased; swelling of the abdomen, somewhat tympanic; slept a little; pulse hard and frequent; vomiting fre-
quent. Ordered, venesection 3 xx., castor oil 3 i., turpentine 3 iss., enema with comp. ext. colocynth 2 iij., to be repeated every two hours during the day; blister (flies) over the region of pain. 9, p. m., no particular change: blister not drawing. Ordered, opium grs. iiiss. every two hours during the night; enemata continued.

20th, 9 a. m. Slept very little; no evacuation; muscular prostration very great; pulse small and frequent, 130; blister had drawn well: Ordered, croton oil gtt. iij. every two hours, and enemata during the day, composed of gruel water, sal. epsom et senna, etc. 9, p. m., no improvement; stercoraceous vomiting; unable to retain either water or medicine in the stomach 10 minutes. Ordered, crude mercury 3 iss. every hour until 11 i. was taken, opium grs. iiij. at 10 o'clock, to be repeated three times during the night.

21st, 9 a. m. No evacuation; an aggravation of all the symptoms. Deeming it unwise to administer medicine by the mouth, as they were immediately rejected by the stomach, I continued only enemata, composed of comp. ext. colocynth, sal. epsom, senna, etc., during the day. 9, p. m., no evacuation; vomiting and restlessness continued. Ordered, enemata with laudanum during the night.

22d, 9, a. m. Had an evacuation about 5, a. m.; after which, he slept well until a few minutes before my visit, when he had another large and very offensive passage; pain relieved, though abdomen very sore, unable to bear pressure; pulse soft, 105; muscular prostration great; some appetite. Ordered, arrow-root occasionally during the day; at 9 p. m. calomel grs. x.

23d, 9, a. m. Slept well; calomel operated three times; less abdominal soreness. Ordered, ext. gentian grs. v. every three hours, arrow-root, soup, etc.

24th., 9, a. m. Ordered, the ext. gentian to be continued for a few days, and his bowels kept in a soluble condition by enemata, if necessary, and suspended my visits.

Case IV. A lady, æt. 38, was attacked, fifteen days previous to my visiting her, with the bilious fever, which though violent at first, seemed to be gradually yielding to the judicious treatment of her family physician. Seven days before I saw her, her bowels became constipated, though previously they
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were easily acted upon by ordinary cathartics. The physician in attendance, a gentleman of considerable experience and skill, had used during the period of constipation a great number of the ordinary cathartics, together with croton oil, freely; varied purgative enemata, cold and warm water, infusion of tobacco, etc., without success.

Sept. 12th. I was called in consultation: she presented the following symptoms: countenance, anxious and expressive of much apprehension; extremities cold; pulse, small and frequent; pain in lower part of abdomen great; abdomen swollen and tender; vomiting whatever was taken into the stomach, and occasionally bilious matter. We gave her crude mercury \( \frac{3}{4} \) i. every hour until \( \frac{1}{2} \) i. were given.

13th., 10, a. m. No improvement. Ordered, enemata during the day. 10, p. m., mercury passed with considerable feculant matter. Case speedily recovered under the treatment of the family physician.

Although I have used successfully crude mercury, in fifteen cases, I deem it unnecessary to extend the limits of this essay, by narrating them; particularly as they present no differences from the cases detailed, other than those which would necessarily result from age, sex, condition and idiosyncrasy. Of the eleven not narrated, seven were similar to cases 1 and 4; two similar to case 3; and two similar to case 2. It will be apparent, upon an examination of the symptoms of the foregoing cases, that in the 1st and 4th, constipation was probably owing to a loss of muscular power in a portion of the intestinal canal; in one, case 2, there was some mechanical obstruction, probably intussusception; and in one, case 3, there was primarily bilious colic, which subsequently terminated in ileus. I am induced to advise an adherence to the doses and intervals, which I observed in the administration of crude mercury, because I have not, in the few experiments made upon dogs, found it to operate much more speedily when given in lbs. doses, and in some condition of the bowels, in ileus, hopeless injury might be done by throwing into them larger quantities, at once, of a metal of such gravity. It will be observed that the mean time of passing through the alimentary canal, in the cases detailed, except case 1, which is sui-generis, is fifteen hours; although I have known
it vary from ten to thirty hours. It is not needful to my pur-
pose, at present, to discuss the hypothesis offered by Dr. Aber-
crombie, and approved by others, that the distended part of the
bowel is the real seat of disease, but rather to draw the follow-
ing practical deductions from my experience in the employment
of crude mercury:—

1st. It is a harmless remedy, given in proper doses.

2d. It is a potent, though tardy, remedy; requiring fifteen to
twenty hours to operate.

3d. Its passage through the canal is principally accomplished
by distension, aided, perhaps, through a portion of it, by its
own gravity.

ARTICLE XXXII.

Another Operation of Lithotomy, under the influence of Cloro-
form, by Prof. Paul F. Eve. (Reported by Edward Girardey, Student of Medicine, Augusta, Ga.)

On the 26th of May last, I had the pleasure of witnessing my
preceptor, Dr. Eve, perform the operation of Lithotomy, under
somewhat peculiar circumstances.

The patient is the son of Capt. P., of South Carolina, aged 5½
years. He was a seven months child, and at birth was so
feeble that little expectation was entertained that he would
survive. For months the child could be held in the palm of the
mother's hand, who, during gestation, had been extremely ill
with fever. From early infancy, difficult urination occurred.
The various domestic remedies used on such occasions having
been exhausted in the case, a physician suggested the probabili-
ty of urinary calculus.

It is proper to remark that the patient, from its very feeble
existence at birth, and long continued suffering from the pre-
sence of stone in the bladder, was only partially developed, both
physically and intellectually. He still has chorea. Indeed, to
some extent, he may be considered deaf and dumb: with great
difficulty can he be made to comprehend ordinary conversation,
or what is passing around him.
Dr. Eve having detected a calculus, by a sound introduced on the 25th, preparations were made for the operation the next day. The patient was also subjected to the inhalation of chloroform, and it acted very kindly upon him. At 10 o'clock on the day appointed, the bi-lateral operation was performed with Dupuytren's instrument. The stone was reached with the finger in about half a minute, but some time was consumed before it could be secured in the forceps. It proved to be a mulberry calculus, of an ovoidal shape, and weighed 2 drachms 4 grs.

For more than an hour after the operation the little patient could alone be quieted by chloroform. During its performance, he evinced no sensibility, and the gratification of the parents at this result, seemed to know no bounds.

The patient was up in a few days, not only in the room, but out of doors. No effort was made to close the wound until the ninth day—when the urine, which had passed previously both through the incised parts and urethra, resumed its natural channel.

PART II.—REVIEWS AND EXTRACTS.

ARTICLE XXXIII.

New method of performing Cheiloplasty. By Dr. C. Sédillot, Professor at Strasburg. (Translated for this Journal by Henry Rossignol, M. D., of Augusta, Ga.)

The anaplastic operation is most frequently employed for the restoration of lips, than for any other purpose, and it is seldom crowned with more success than in such cases. The elasticity of the integuments of this region permits us to obtain flaps sufficient to restore the apparently irreparable loss of substance, by suitably varying the extent and direction of the incisions and detachments.

Taliacotius has left us a description of his method, which is to form flaps from the fore-arm, or arm, and it would, certainly, not be very difficult to make the same use of the skin of the hand, when protracted contact with the chin would neither be very painful to the patient, nor very difficult for the operator to maintain; nevertheless, the Italian method has been justly abandoned on account of its relative inferiority, and has been replaced by the more sure and efficacious methods of the Indians and French.
Delpech, Dupuytren, M. M. Lallemand, Dieffenbach, and Textor, have had recourse to the Indian method, and generally with but little success. The integuments of the cervical region, dissected to a great extent, to replace the whole of the inferior lip, which operation was rendered necessary on account of the destruction which existed, became gangrenous in the majority of instances; and when this accident does not occur, the flap, incessantly drawn down towards its pedicle by the double effect of its weight and contractility, abandons by degrees the level of the teeth, applies itself to the denuded part of the maxilla, and does not even serve to retain the saliva.

The French method, which would, as I have remarked in my Treatise on Operative Medicine, be more properly demonstrated the method of Celsus, or the ancient method, is in all cases much to be preferred, whether the integuments of the neck be dissected to cover the chin and reform the lip, as did Chopart, M. M. Roux, (of Saint-Maximin,) Morgan, Serre, (of Montpelier,) etc., or whether the integuments of the cheeks be separated on either side and made to approach the median line, to be united by a few sutures.

These methods are of easy execution when only a part of the lip has been destroyed. The examples of success are innumerable, and there is a great advantage in using the cheeks to reform the lip, inasmuch as the flaps are lined with a mucous membrane. Success follows also where the whole of the lip has been destroyed; but if the disease, after having been healed several times by caustic or the bistoury, has returned, and not only the lip, but a part of the cheeks, have become affected and ulcerated, the French method offers but little success.

The elasticity of the skin, however considerable it may be, is nevertheless limited, and when the sutures are too tightly drawn, the integuments inflame, tear loose, and do not unite, the loss of substance is not repaired, and a deformity, more or less hideous, still persists.

It is in vain to try secondary incisions, the operation fails completely, and aggravates the condition of the patients; or yields lamentable results.

The conditions necessary for success in anaplastic operations are:—

1st. To have flaps susceptible of repairing the loss of substance, and of being placed in contact, and retained so, without impeding the circulation and without danger of gangrene. Thus, and only thus, the deformity is not palliated for the moment only, but it disappears forever, because the flaps remain perfect and cicatrization goes on rapidly and regularly.
2d. It is necessary that the anaplastic flaps be sufficiently support-
ed in the position given them, and for this it is indispensable that their
pedicle be not on the side opposed to the free and unremitting edges
desired to be restored, such as the edges of the lips or of the eye-lids.

It is, indeed, beyond doubt, and experience confirms it daily, that the
integuments serving anaplastic purposes tend incessantly to retract in
proportion to the remoteness from their attachment or pedicle, where
they are less supported, and it appears to us incontestible, notwithstanding all assertions to the contrary, that a quadrilateral flap length-
ened from above downwards, detached from the cheek to which it
adheres by its inferior extremity only, and turned up of a piece on the
inferior eye-lid which it is to reform, will infallibly drag the latter
down, on account of the absence of all resistance capable of supporting
the slow and constant retraction just mentioned. It is the same when
the integuments are detached from beneath the chin and simply
brought up to replace the inferior lip. The flap thus formed will de-
scend gradually towards its point of origin, that is, from above down-
wards, not being at all supported in a contrary direction, since the
superior border is to remain free and without adherence, to reconsti-
tute the free border of the lip. Hence the important rule in anaplastic
operations, of placing the fixed points of the flaps in an opposite direc-
tion to that in which their own weight would tend to draw them. Thus
for the inferior lip, the origin or pedicle of the flap should be situated
above, or at least on a level with the free border of the organ. An
important peculiarity which has been neglected pretty often even by
surgeons who believed that they had made considerable progress in
this branch of our art.

3d. A third rule, particularly applicable to Cheiloplasty, seems
worthy to be set forth. It is essential, as Delpech and M. Dieffenbach
so well understood, and as M. Serre (of Montpelier) so clearly demon-
strated, that the new lip should be lined with a mucous membrane.
All bleeding surfaces, placed in front of the dental arch, will adhere
to the wound made in front of the maxilla if not sufficiently supported,
and will cause all hopes of obtaining a free and moveable lip to vanish.
Delpech tried to double the flap upon itself, so as to form thus a mucous
membrane by transformation, and this idea seems to us quite ingen-
ious, and one from which all the advantage has not been derived that
might be expected.

Professor Serre (of Montpelier) has insisted upon preserving the
mucous membrane in all cases whenever it is healthy. It is an advice
which no one will think of overlooking, and it is not presumable that
a surgeon, with a little experience or instruction, would ever be disposed to sacrifice, without motive and against all reason, such an important membrane. Therefore, if the mucous membrane has been destroyed, we must try to replace it by the skin, as advised by Delpech, and success seems certain, if we can prevent mortification of the flap, and give the pedicle or point of origin a higher level than its free border, which conditions may be easily attained by my new method. If, on the other hand, the mucous membrane exist, care should be taken to make use of it.

It has sometimes happened, and an example may be seen in the work of M. Serre (of Montpelier), that a large portion of the skin of either cheek has been detached, and united on the median line in front of the mucous membrane. The success of this method is easily understood, and we are far from denying it; but we will remark, that in all cases in which the integuments are thus applied upon moving tissues, these will fold and pucker at the junction of the flaps, interposing themselves between their edges, and thus be a great obstacle to union and final cicatrization. This truth may be verified in all cases where vicious cicatrices are excised. If care is not taken to remove the subjacent fatty tissue it will pour out between the edges of the wound, because it is forcibly drawn in this direction by the approximation of said edges.

The same phenomena occur in the mode of Cheiloplasty, which I notice. The flaps draw with them the tissues with which they are lined, and the preserved mucous membrane becomes folded, and swelling out towards the point of union, becomes an obstacle to the speedy formation of a cicatrix. It would therefore be manifestly more advantageous to apply free flaps upon the undisturbed mucous membrane, which would unite without either tension, force or violence, and which would have sufficient amplitude to extend over and preserve all the mucous membrane, instead of tending to fold it upon itself.

The following case will enable us to judge more easily of the value of these precepts, and will render the advantages of my new mode more clear:

Cancerous Ulcer of the whole of the inferior lip and of a portion of the chin and cheeks; ablation and Cheiloplasty—by a new method of Professor Sédiillot. (Indian method by double flaps.) Case drawn up by M. Schelsbach, house-surgeon.

Case.—Velon (John Nicholas), born at Dévillez, near Epinal, farmer, aged 46 years, admitted to the Surgical Clinique of Strasbourg as a paying patient, on the 12th April, 1847. This man, of a strong
constitution and sanguine temperament, is exempt from hereditary dis-
eases, does not smoke, and had always enjoyed excellent health, when
about twenty-one months since, he perceived, without known cause,
in the middle of the free border of the inferior lip, a transparent vesicle,
which ruptured and formed an ulcer.

At first, this slight lesion was not at all painful, and did not alarm
the patient, who felt only a slight itching about the part; but at the
end of five months the ulcer enlarged and became the seat of sharp
and lancinating pains; the saliva escaped involuntarily from the
mouth, because of the loss of substance already sustained, and Velon
placed himself in the hands of barbers and shepherds who promised to
cure him.

The principal treatment consisted in applications of caustics, which
were repeated more than thirty times during the first year. There
was at first an effort at cicatrization; but the ulcer very soon re-opened
and made new progress. In vain did the patient invoke the assistance
of a physician and take alteratives, the disease became worse each
day, and Velon determined to put himself under the care of Prof. Sédillot.

The patient, on his admission at the Clinique, has his face injected.
All the free border of the inferior lip from one commissure to the
other, a small portion of the cheeks, and the projection of the chin, had
been destroyed by the ulcer. Two scars about the size of a dime,
produced by the last cauterizations, exist at the angles of the mouth.
The mucous membrane is nearly untouched throughout, and only a
little excoriated on the border of the lip. This membrane is turned
outwards. The teeth covered with tartar, remain uncovered, and the
saliva drips continually on the clothes of the patient.

The tissues surrounding the ulcer are slightly swelled; but are not
painful. The sub-maxillary glands are not engorged. The patient
feels a heaviness of the head, vertigo, buzzing of the ears, and puffs of
heat in the face. His sleep is agitated. Nothing abnormal in the
respiratory and digestive functions; there is a slight tendency to con-
stipation.

M. Sédillot having made a microscopical examination of some of
the particles of the ulcerated surface, did not recognize the distinctive
characteristics of cancer, and pronounced it a canceroid affection.

The treatment consisted for the first few days of general blood-
letting, cathartics, narcotic, emollient fomentations and vegetable
regimen.

After this, a few cauterizations were tried with nitrate of mercury
(azotate acide de marcure), solidified paste of Vienna (pâte de Vienne-
solidifieé), and the arsenical paste of Rousselot (pâte arsenicale de Rousselot), but without advantage.

The wound made in venesection having inflamed, and the commencement of a suppurating phlebitis being perceived, 15 leeches, poultices, arm baths, embrocations of lard, slight laxatives and abstinence caused the disease to disappear.

May 6. The condition of the patient being good, and the ulcer continuing to enlarge, M. Sédillot decided upon the removal of it, and to supply the loss of the lip by a new mode of anaplasty.

After having etherized the patient sufficiently to allow him to operate before he awoke, M. Sédillot circumscribed the ulcer by two vertical incisions, having their points of departure at a short distance from, and above the commissures, and united them by a transverse incision passing over the projection of the chin.

The flap thus made was dissected away, and the mucous membrane preserved. A large quadrilateral wound remained, produced by the ablation of diseased tissues.

M. Sédillot then proceeded to the reparation of the lip.

An incision, commenced at the height of the border of the lip, about a finger's breadth on the outside of the loss of substance, descended vertically to the left upon a portion of the cheek, then upon the maxilla, and then extended two centimetres in the supra-hyoidean region.

A second incision commenced lower down, and more internally, from the angle of the first wound, resulting from the ablation of the ulcer, was also extended vertically and united to the lower end of the preceding by a transverse section.

The cutaneous flap thus formed was immediately detached from below upwards.

The same process was repeated on the right side, and M. Sédillot thus obtained two lateral flaps, which he raised and turned inwards towards each other, taking care that they might meet on the median line.

M. Sédillot having ascertained that the loss of substance could be regularly filled by the process, first united, with pins, the two vertical borders of the wound, produced by the removal of the flaps. They were now united to each other on the median line, then to the chin inferiorly, and to the preserved portion of the mucous membrane superiorly. All these last sutures were made by whip-stitch, with an ordinary needle and very fine thread.

The dental arch was by this means entirely recovered and the saliva retained.
The dressing consisted of a little bag, filled with ice, placed in contact with the wounds, and retained by a common chin bandage.

A kind of bib, made of oiled-silk, whose inferior border was folded upon itself in the form of a gutter, and inclined towards a vessel, preserved the cloths and bed of the patient from moisture.

Velon, on returning to consciousness, appeared much surprised to find that he had been operated upon; but on looking at himself in a glass, he wept, alleging that the roots of the disease had not been taken away, and that not only the lip, but the greater part of the integuments of the cheeks and cervical region ought to have been removed.

M. Sédillot, who had until now, appeared to adopt the ideas of the patient concerning these pretended roots, caused long filaments to be separated from a tendo-Achillis which he presented to Velon, assuring him that they had been drawn from the wound during his sleep. The patient was thus appeased and regained confidence. Cephalalgia during a few hours after the operation; pretty abundant hemorrhage below the left flap; quiet night, sleep. The next day no headache; physiognomy calm; skin moist; pulse 74; no thirst; no appetite. The left flap seems a little raised by clots of blood, and is slightly stretched and reddish.

May 9. The right flap is entirely united, but the left adheres but little; it suppurates, and has at its free extremity a point of mortification a few millimetres in extent. The pus is gently pressed from under the flap, and the parts fomented with aromatic wine.

May 11. The threads of the sutures are cut, and many of them drawn out, as well as the pins; the use of ice is discontinued, and the suppurating flap supported by bands of adhesive plaster.

May 12, 13, 14, 15. Excellent health. The mortified extremity of the left flap taken off, and secondary union by the first intention (réunion immédiate secondaire) is tried, but in vain, notwithstanding the great laxity of the flaps. These, although perfectly alive and the seat of an active circulation, have lost all sensibility, and may be transfixed by a pin without giving the least pain.

May 16, 17, 18, 19, 20, 21. The pins with which the secondary union by the first intention (réunion immédiate secondaire) was tried, have torn the tissues without producing adhesion, a transverse double-headed roller bandage is not more successful, and the extremities of the flaps uniting by their inferior border only, have left a slight depression between them superiorly.

May 26. The cicatrization is complete, and on the 29th the patient left the hospital. The depression was scarcely perceptible. The two
lips meet very well. The alveolo-labial gutter being re-established, prevents the involuntary flow of saliva. The preserved mucous membrane, lined the internal face and superior border of the new lip, the commissures remaining only a little puckered. M. Sédillot proposed to remedy this by the ablation of a few of the folds; but as the patient was satisfied with the cure thus far, and as he was very anxious to return home, M. Sédillot did not insist upon the advantages of a more perfect restoration, which nature would naturally accomplish.

This prognosis of M. Sédillot was rapidly realized. The patient returned to Strasbourg in July and at the end of August. The cicatrix had remained perfect, and the new lip as well as the commissures had become more supple, thinner and consequently more regular. The teeth were entirely hidden, and notwithstanding the cicatrices, one would with difficulty have suspected the nature and gravity of the operation he had undergone.

The Indian method of double flaps, of which the description has just been given, and whose results may have been appreciated, appears to offer the most favorable conditions of success in a great number of anaplastic reparations.

1st. The flaps have a great degree of vitality, because of their shortness, the width of their base, and the feeble degree of traction of the pedicle.

2d. We may thus undertake to restore by anaplasty, either the whole of the lip, the face, or any other part, with greatly increased chances of success, since the principal danger, which consists in the mortification of the flaps, is avoided with almost entire certainty.

3d. The tissues employed in forming the new lip are not submitted to any traction, and it is easy to give them sufficient amplitude to prevent all future unpleasant retraction.

4th. The new lip being supported near the commissures by the pedicles of the two flaps which constitute it, and which are continuous with the cheeks, is drawn up in the direction of its free border, a very great advantage to which sufficient attention had not until now been paid. Suppose the base of the flap was below the border of the lip, this would infallibly be drawn down, and would eventually leave the dental arch exposed, as has been observed in the primitive methods, or those modified by Chopart.

5th. The perfect vitality of the flaps augmented by the width of their base, in the case where the reparation is considerable, would permit us to realize successfully the ingenious idea of Delpech, and to double the skin upon itself to replace the mucous membrane. This
result would be obtained, however, spontaneously by the simple precaution of notching from above downwards, on a level with the labial commissure, the free border of the flap destined to represent the contour of the lip; the latter would turn inwards by the cicatrization.

6th. The loss of substance produced by the dissection and turning up of the flaps is inclined to unite readily by the first intention, in the cervical region where the integuments, besides their extreme laxity, rest upon compressible planes, this does not exist upon the maxilla whose osseous formation is fixed and immovable.

7th. Another advantage is, that the subjacent mucous membrane is not puckered in the case where this membrane might be preserved; this is a favorable condition of the Indian mode, and we will add the perfect integrity of the flaps which being taken from a region more or less distant from the seat of affection, lessens the probability of a return of the primitive disease.

Our method appears to us to be much superior to the French in similar cases to the one we have mentioned, and believe it may receive numerous and important applications.

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On the Treatment of Fever by Cold Water. By William Gill, M.D., Physician to the Nottingham Dispensatory, &c. (Ranking's Abstract.)

Before entering more immediately on the object of this paper, the author describes concisely the general features of the prevalent fever. In most cases the immediate cause of the attack was traceable to sleeping in crowded lodging-houses, the usual abode of fever in large cities; the proximate causes, doubtless, were over-fatigue, and insufficient and unwholesome food. The term "hunger pestilence" has been aptly applied to the disease. A true typhoid gastro-enterite was present in many of the patients, closely resembling what so frequently is observed in the Parisian hospitals. Whether the essentiality of the fever existed in the condition of the mucous-alimentary membrane or not, it was not the author's intention to discuss. This, however, he remarked, that so soon as the signs of gastro-alimentary irritation were subdued, the signs of general fever subsided. Some two or three cases, which he read, corroborate this observation. In the generality of patients under his care, not only was the gastro-alimentary membrane affected, but also the mucous-pulmonary, as evidenced by cough, shortness of respiration, and frequently universal sonorous râles, affecting the
whole of the chest. In most of the Irish sick, the skin was spotted with petechiae, of different sizes and colors, chiefly developed on the abdomen and chest. This was not remarked amongst the English cases. There was no discharge of blood from the inner membranes. Edema of the lower extremities occurring early in the disease was generally a fatal symptom, though we had two cases of recovery in boys, who were universally anasarcs from the commencement. The disturbance of the sensorium was marked by low muttering delirium, sometimes wandering about the bedroom, constant picking at the bed-clothes, and subsultus tendinum. Some were affected with a heavy, comatose, and stupid state, from which they were with difficulty aroused, and when aroused, with difficulty were made to understand questions; they relapsed immediately into the same lethargic condition when left to themselves. This comatose condition often continued till convalescence was established, and in some even later. It seemed a perfect prostration of all mental energy, and was only relieved as the bodily powers regained their tone. In no one case did active delirium occur. The secretions from the bowels were thin, frequent, black, and offensive, and often attended with severe griping, but no bloody discharges. The function of the bladder in one or two individuals was suspended and it was necessary twice daily to use the catheter. The usual period of the termination of the fever seemed to be from the eighteenth to the twenty-first day, at which time the patients were left in a state of the greatest prostration. When the case terminated fatally, an unrousable, unconscious coma closed the scene. The usual symptoms of fever were generally present,—as the hot dry skin, black tongue, urgent thirst, pulse varying from 90 to 130, insomnia, and pains in head, back, and limbs, &c. After this brief description of the general features of the disease, he proceeds to the treatment.

He remarks that he is well aware that a great prejudice exists in the profession against the treatment to be advocated, partly because it is opposed to preconceived opinions, and chiefly from the unprofessional manner in which it has been ushered into notice. Feeling certain, however that he was addressing a body of gentlemen willing to receive truth for the sake of itself, he with perfect confidence, detailed a treatment of fever as yet untaught in the schools, and generally unrecognized by the profession.

Dr. Currie, of Liverpool, was the first scientific English physician, who enlisted cold water as an external remedial agent in the treatment of fevers. Successful as the practice was under his direction, it has been little followed in later times. It is
only within the last few years that the prejudice which existed against the internal and external use of water has begun to subside. "Perhaps," observes the author, "the prominence of the sanitary questions, and the many evils proved to arise from the want of a due supply of pure water, has had much to do in removing this groundless prejudice, and may have produced an undue reaction in its favour, causing it to be considered not only as necessary to a healthy condition, but as a curative agent of universal efficacy. Hence, perhaps, the public mind has been somewhat prepared to receive the hydropathic theory with much more favour than its intrinsic merits demand. An universal remedy will ever find many advocates, and in a numerous profession like ours, there are ever men to be found who, from selfish motives, will pander to this diseased taste of the public mind. We, as an association, must ever protest against such exclusive theories as prevail in our days, being in our opinion unscientific, opposed to experience, and calculated to lead to incorrect views respecting the power of many known and valued medicinal agents. In making this protest against any exclusive theory for the cure of diseases, we must not rush into the opposite extreme, and, from disbelief of their universal efficacy, deny their particular efficacy, when the touch-stone of experience speaks to the contrary."

The plan the author has adopted for the cure of fever, has been a modification of Dr. Currie's. Instead of pouring buckets of cold water over the body, he has it enveloped in a wetted sheet, an instrument more effective than Currie's in reducing the temperature of the body, and producing a warm and comfortable perspiration, which did not uniformly follow his plan. The fear of evil consequences from this treatment is groundless. He gives no opinion as to its utility, except in cases of fever. Here, however, he states that he can speak with confidence. When the skin is burning hot, and the mouth and tongue parched, the application of a sheet wrung out of cold water, and applied closely to the whole surface of the body, and evaporation prevented by the application of three or four blankets placed over it, produces a most grateful feeling of refreshment, which is soon followed by a more or less warm perspiration. In young people, this perspiration breaks out in from five to ten minutes after its application; in middle-aged people the period is longer. Many uncomfortable sensations are soon relieved by its use; such as the muscular pains in the back, thighs and legs, and the sense of aching and weariness; the thirst often becomes less, and even the dry tongue sympathises with the relaxing influence induced on the cutaneous surface. He has seen the low moaning delirium subside whilst
under its use; and some patients, who have not slept before, doze, especially if the hair has previously been cut short, and a flannel nightcap, wetted with vinegar and water, been applied to the head.

The simple plan he has followed has been this:—On a flock-bed he has placed from three to five blankets, superimposed over these, a sheet wrung out of cold water, on which the patient, stripped, is placed, with legs outstretched, and arms to the side; the sheet is then drawn tightly around, up to the neck, and inclosing the feet; first, one blanket, then another, and so on to the whole number, are tightly drawn over the sheet, so as to have the whole body well and closely packed. In this state, the patient lies from a quarter of an hour to one or two hours, according to the object in view, and the effect produced. Some get tired at the end of half an hour, some can continue for one or two hours, and feel very comfortable. As soon as a gentle perspiration commences, a wineglassful of water is given frequently. At the commencement of this treatment, in a case of fever, he has generally ordered its use for one hour; after that time the wet things are removed, and the sick person is placed in a bed, well wrapped in three blankets, and allowed to perspire for three hours; afterwards, the blankets are to be carefully removed, one at a time, so as to allow the perspiration to subside gradually, and the patient is then placed in bed, between the sheets.

During the whole of this period, small quantities of water should be given. In the summer, during this process, a free ventilation may be allowed in the chamber, in winter it is necessary to have a good fire, and to have one blanket well warmed, to apply around the body, so soon as removed from the wet sheet.

Several cases of incipient fever have lost all traces of disease after the first application. If the fever be not reduced, the next day the same plan must be repeated, keeping the patient in the wetted sheet from half an hour to one hour, according to the intensity of the symptoms, and in the blankets from one to two hours. This may be repeated every day till indications of a cool skin arise, then it must be immediately discontinued.

During some period of this treatment the temperature of the atmosphere being very high, (75° to 78° in shade,) the author has not found it advisable to keep the patient as long as two hours sweating in the blankets; from half an hour to one hour was sufficient. A longer period caused the pulse to be accelerated instead of lowered, which latter is the usual effect of the treatment. In very hot weather, when a free perspiration has been induced at the commencement of the fever, he has adopted
the following plan. To wrap the sick person for half an hour in the wet sheet, covered lightly with one blanket; to be then washed all over with a towel wetted with tepid water, then rubbed dry, and placed in bed between the sheets. He has not found it necessary to make use of this treatment more than five times to the same individual; generally, after the third or fourth application, the skin becomes cooler, and the other signs of fever gradually subside. When the skin becomes cool, and the tongue less dry, he has instantly discontinued all water remedies, and given bark, wine and broths, and it was surprising how soon convalescence and strength became established. During the whole course of the fever, milk and water, or weak broths, were allowed ad libitum. In one person, twice in the course of the same day, owing to the intensity of the fever, it was found necessary to repeat the wet sheet, using it the second time for only half the period of the first; comfortable night ensued.

Without doubt, this is a most effective mode of quickly reducing the temperature of the body; an equilibrium is soon established between the cold of the water and the heat of the body, and the patient becomes bathed in a natural vapor-bath, as may be felt by placing the hand under the bedclothes. Where the fever runs high, and the delirium is violent, the wet sheet may be safely applied for short periods, (two minutes,) several times in the course of the day. This will be found a more effectual mode of reducing the cerebral excitement, than any other means with which we are acquainted. This refrigerating plan, used for ten minutes, during an evening exacerbation, will often produce a few hours' refreshing sleep.

The author confesses that he had, at first, great doubts as to the safety of this treatment, where the mucous membranes of the bronchi and gastro-alimentary passages were complicated. Very soon his fears on this head were dissipated by the convincing evidence of experience; in fact, these proved the cases in which the decided benefit of the treatment was most marked. The quick and embarrassed respiration, dry cough, and sonorous râles, subsided quickly after one or two applications of the wet sheet; the cough became looser, the râles moister, and expectoration was established.

The same happy change also occurred where the gastro-alimentary membranes were disordered. Generally, the first wet sheet puts a stop to the diarrhoea, and soon afterwards, pain and swelling disappeared. A confined state of the bowels was frequently the effect of the wet sheet; and it was found necessary, in several of the patients, to resort to small doses of castor oil. In three or four cases, the symptoms of gastric and ab-
dominal irritation or inflammation were so violent as to have justified the employment of leeches, calomel, and opium; and, indeed, we know that depletion by leeches is the usual treatment followed in the Parisian hospitals, and yet by the simple means mentioned, in three days every bad symptom had vanished. A great saving is made to the patient's strength, when we can dispense with the abstraction of blood.

On the Source and Influence of Malaria in the South-west.

By Dr. A. G. Lawton, of Marshall, Missouri.*—(New York Journal of Medicine.)

What I conceive to be the most prolific source of malaria is, animal matter in minute fragments, mingled with vegetable matter in a process of slow decay. Where wash-water is being constantly thrown out, around houses, in by and shady places, amongst rubbish, where old bones and vegetable matter are left to rot by slow degrees, it cannot fail, after a long time, to give rise to, or produce a pestilential effluvia, especially in very dry seasons; for it is generally the case that wash-water contains more or less animal matter, and that, too, of a kind favorable for the generation of miasmatic exhalations.

It will be found generally the case, that the sickly season does not commence until the thermometer falls a little from its extreme point, and the sky assumes that peculiar veiled appearance that it has in the latter part of the summer, and the autumnal months, or in very dry times. The fore part of the season is the healthiest part of the year, for the heavy rains and storms of the spring have swept all noxious matter from the air, and left it rightly and equally tempered. It generally happens, that as the drought increases the dews lessen, until the healthful moisture of the air is gone. Now, at this time, the intensity of the sun's rays is on the wane, for this occurs in the latter part of summer and fall, and the hottest days of the year are in the last of June and the fore part of July, and the most sickly time is in September, and sometimes in October.

When the dews begin to lessen a little, the sky assumes a dark or red appearance, and the sun's rays are a little blunted, as though its rays were in some way obstructed; until now the evaporation from the earth's surface is not very poisonous, but now the evaporation from all the high lands, and drier part of the country, is very trifling, and daily lessens; and now the drought increases. At this time the water is mostly gone from

* In 3d vol. we published an article from Dr. L., taken also from the New York Journal. Mississippi was put for Missouri.—[Edi. S. M. & S. Jour.]
the earth's surface; the ground parched by drought; the atmosphere already deprived of all healthy sources, whereby it might be supplied with moisture, at the very time when there is the greatest necessity for it; and this lack of humidity in the air must be supplied from some source, and this vacancy is soon filled up by an increased and rapid evaporation, from the half dried swamps, stagnant pools, sinks, gutters, sewers, and from the banks and bottoms of streams, where the water has fallen and left the mud exposed; from these sources the moisture of the air is still maintained, and the atmosphere is still humid.

But now the equilibrium of the air is partially destroyed, it being over-dry in some places, and excessively humid in others; for this humidity is not like the humidity which comes from clouds and storms of rain, which in itself is harmless, but it is a humidity formed of noxious vapors, constantly springing from decomposing matter; which, being either chemically united or mechanically mixed with some elementary principle evolved from decomposing matter, is thereby rendered much heavier than humidity from other sources, and becomes incapable of rising very high in the air, unless it is forced up by some fixed current of wind; and thus it happens that, under these circumstances, the atmosphere becomes unequally tempered. And now the moisture of the earth is so far exhausted on all the uplands, that it cannot afford much material for evaporation, and this process is of necessity limited to a small surface, that is, from swamps, marshes, ponds, streams, etc., from which places evaporation is very much increased, and the vapors rise in denser volumes, bringing up the poisonous exhalations from these places, where vegetation, flies and reptiles, have fallen and rotted for ages; where the matter, after being long steeped, is every year dried down, in the latter part of which process there is formed, and evolved from this mass, by the action or re-action of decomposing elements on themselves, a something which we call malaria, long known by its effect, being followed by a certain train of diseases peculiar to themselves, and known to be produced by no other morbific effect.

Now, under these circumstances, should the wind be low, which is generally the case, sometimes a dead calm prevails, or the wind sets lightly from an eastern direction, blowing with a current just strong enough to move the poisonous vapor from its resting place, and spread it over the country; and should this state of things exist long, and progress to an intense degree, a sickly time must inevitably follow; and when this state of things does progress to an intense degree, it is generally brought to bear most severely on the community in the autumnal months, increasing as the cold season approaches, or until some violent
storm or frost occurs; when the reverse of this happens, the sickness of the season is very much modified, assuming less of an epidemic character.

I am convinced, from experiments and observations, that wood is capable of generating an immense amount of this poison; decomposition of the ligneous fibre is slow, and where it is long exposed to wet and dry, as in marshes, pools, and about houses, for many years, I believe it will produce a pestilential effluvia. If pools of water, standing in the blue clay on these prairies, have nothing of the wood kind in them, the weather being very dry and hot, so the water does not move in or out of these pools, in two or three months the water becomes perfectly sweet and clear, and if it is not agitated from the bottom, it may be drunk or used with impunity; but if these pools contain logs, chips, brush, leaves, or wood of any kind, that is, old and in a decaying state, then the water never becomes either sweet or clear, but assumes a dark color, and the drier the weather, the blacker it gets, when it becomes an active and certain poison, producing on the human constitution sudden and alarming effects, accompanied with excessive vomiting and purging, extreme prostration and death. And how much sickness there is produced by drinking water impregnated with this poison, is difficult to say, as water holds it in solution in every degree, from the minutest quantity, which would require years to affect the constitution, up to a degree of concentration sufficient to destroy life in a few hours.

The Indians suffer less from these causes than the whites, and the reason is obvious; they seldom live long in a place, constantly moving from one place to another, and often burn their tents, and erect new ones, and a fire is kept constantly burning in the centre of the tent, around which they sleep; they do not live long enough in a place for the accumulation of filth to become an effectual source of disease.

Although these countries, as a general thing, are not subject to extreme atmospheric vicissitudes, yet it sometimes happens that we have inflammatory diseases in the cold half of the year, as inflammation of the lungs, pleura, and the like; and although they occur at a season of the year when the air is free from all noxious exhalations, yet they generally assume that grade and type which is common to malarial fevers, and they generally fall most intensely on those living nearest the focus of miasmal emanations; hence I count them as malarial; and taking this view of the subject, I have long since concluded to bleed less and give quinine more, and with this treatment I have been much more fortunate than when I used the lancet.

But antimony is our main reliance in these cases. Tart.
antimony, judiciously administered, will seldom disappoint the physician’s expectations. As soon as the pulse falls, and the expectoration becomes a little modified, I add quinine to the antimonial powders; and when the antimony is no longer indicated, I continue the quinine, combined with ipecac., and sometimes Dover’s powder. (My Dover’s powder is made with the nitrate of potassa in place of the sulphate.)

I have only one thing more to add at this time, and that is, with respect to the use of quinine, combined as described in my former paper. (South. Med. and Surg. Journ., vol. 3, p. 159.) Make a powder of quinine, camphor and pulvis Doveri, then the powder will contain quinine, nitre, opium, ipecac., and camphor; now, if you increase the ipecacuanha a little, you will have a better powder for winter fevers, for ipecac. increases the effect of quinine very much, especially in fevers that verge towards the continued type. I look upon opium and camphor as important additions to quinine, unless contra-indicated, and we seldom meet with a case where nitre is not admissible. In treating fevers, there are many indications to be fulfilled, some of which quinine alone would not effectually meet. Quinine sometimes operates too locally, and the addition of camphor gives it a more general searching effect; and if the effect should not be increased, I believe it is more effectual by being more particularly directed to certain indications to be fulfilled, which is just what we should be led to expect from a priori reasoning; and in addition to all this, it sometimes becomes necessary to add a more potent and diffusible stimulant, as brandy.

Abdominal Tumor mistaken for Pregnancy. By John Chal-lice, Esq.—(London Lancet.)

[The following case is one of great practical value, and displays forcibly the great difficulty which surrounds the diagnosis of pregnancy. It would, perhaps be difficult to meet with an instance affording stronger circumstantial evidence of that condition.]

Mr. Challice received an urgent message to visit a young lady, said to be laboring under cholera, but from hints received from the maid-servant he was induced to suspect the possibility of pregnancy.

When he arrived he saw a young female in bed, lying on her right side, with her face buried in the pillow, and the knees drawn up towards the abdomen. She seemed to be in pain, but was sullen, and refused to answer any questions. The
mother stated that she had been vomiting, and complaining of pains in the loins, with a constant desire to pass water, and that for the last five or six months she had observed a change in her daughter—the appetite capricious, temper irritable, and on several occasions she had been surprised in tears; notwithstanding, she denied being ill, and continued to perform her domestic duties. These facts seemed confirmatory of the servant's suspicions, and with almost a conviction in his mind of the condition of the girl, the author placed his hand upon the abdomen; it was tense and swollen, and a movement like that of a living foetus was distinctly felt; he then listened and detected a loud and quick pulsation.

The presence of these symptoms induced him to pronounce the patient pregnant. No suspicion had entered the mother's mind; she was an only daughter, and bore an excellent character. However, she did not deny the fact, but after a distressing burst of grief, and a pitiable appeal for forgiveness, she confessed that her cousin had had connection with her once, and only once, about six months before, a few days previous to his departure from England. Being unwilling to aggravate her sufferings by what appeared unnecessary enquiries, or disturb the patient by further and more careful examination, considering the case quite decisive, Mr. Challice contented himself with prescribing some simple remedy for relieving the sickness and pain. The next day there was a great improvement in the condition of the patient; the fear of discovery no longer agitated her, and she had been forgiven. Up to this period she had so contrived to compress her figure, that no increase in her bulk was perceptible when dressed, although her size was quite that of the six months of gestation when undressed. Now that this cruel mental and physical restraint no longer tormented her, she suffered less from pain and sickness, became less sullen, and more communicative.

It appears that the connection took place after prolonged resistance, just previous to the usual period of menstruation; that up to that time there had never been the least irregularity of this function during the three years she had menstruated.

She was greatly alarmed at the absence of the accustomed appearances at the usual time, and did not feel well in health, although she had no marked symptoms; a general sense of uneasiness, with pains in the loins, and an occasional slight feeling of sickness and loss of appetite were felt. When the next period came round, she was pleased at finding herself "unwell," but only to about half the usual extent; menstruation had continued regularly up to the time Mr. Challice saw her; on each occasion, however, more and more scantily. The abdomen
had gone on gradually increasing in bulk, and about five months after the connection the patient was conscious of a movement and pulsation in the abdomen, and believed herself pregnant. The breasts were small, and marked with an indistinct areola; around the eyes and mouth there were dark circles, and her mother said she had fallen away in flesh. Previous to this unfortunate occurrence, the patient not only enjoyed good health, but was remarkable for strength, endurance, and activity, inclined to embonpoint, full of life and spirits, and in her nineteenth year.

During the next month or six weeks Mr. Challice saw the patient occasionally. She complained of no urgent symptom, walked out now and then, had a good appetite and digestion, with sometimes slight irritability of the bladder, and irregularity of the bowels. The gradual increase in size still went on, and the mother (who now slept with the daughter) said that the movement of the child continued. The patient complained of its violence when in bed, and began to suffer from lumbar pains and constant irritation of the labia, which was much increased when she drank beer, wine, or spirits. And so the case went on.

When the ninth calendar month had nearly expired since the connection, Mr. Challice became much interested in the case, thinking it one in which the period of gestation could be accurately ascertained.

On the evening of the expiration of the ninth month the author received the expected message, with an urgent request to hasten, as very strong labor had come on. When he arrived the patient was standing at the foot of the bed, grasping the bedpost, and evidently suffering from pain, although not of a violent character. There was an interval of about ten minutes in the pains, during which she walked about the room, having a very anxious and haggard look.

After a good deal of persuasion she consented to an examination per vaginam, which seemed to cause excessive pain, as she screamed violently, and exclaimed that she was being murdered. At the time, the author thought the patient hysterical, but was much surprised at the narrow constricted condition of the vagina, and the presence of the hymen nearly perfect; the agony, however, produced by the examination seemed so intolerable that the patient, by a sudden and violent effort, threw herself from him, declaring that he should torment her no more.

Finding that the pains were weak and ineffectual, and at longer intervals, and feeling assured, from the condition of the parts, that immediate labor was not at hand, the author gave twenty minims of opium, and left, directing a full dose of castor
oil to be given in a few hours. During the night she slept well; the oil acted freely in the morning; and the next day passed over without pain or any inconvenience, the patient having a good appetite, and being better in spirits. About eleven o'clock at night the pains returned with increased violence, and he found her straining and bearing down at the bedpost. An old experienced nurse declared "that the pains were quite strong enough, with assistance, to bring the child into the world." The mother states, that during the night she had placed her hand on her daughter's stomach, and felt the child move vigorously.

In the intervals of pain the patient walked about the room, and was cheerful, except expressing what seemed to be an unreasonable horror at any examination. The pains commenced in the abdomen, and then extended round to the loins, came on regularly every ten minutes, and were marked with all the characteristics of labor in first stage.

The extreme excitement and dread which the patient evinced when the necessity for an examination was impressed upon her induced the author to waive it, although he was anxious to ascertain the real condition of affairs. It would be useless to detail the diurnal symptoms; suffice it that a week passed over, and matters remained apparently without alteration either one way or the other. I may here state that menstruation did not take place at this period. Doubts now began to rise in the author's mind about the nature of the case; and, when nine calendar months from the departure of her cousin had expired he became very anxious about it. It was at this stage that Dr. Lever was consulted. After a careful and thorough external and internal examination, this gentleman, justly famous for his skill and tact in diagnosis, having the history of the case before him, came to the conclusion that it was "extra uterine impregnation." At that time her physical condition was as follows:—

Countenance pale, an anxious expression; eyes rather sunken; nose pinched; breasts somewhat flaccid; abdomen the size of mature pregnancy, if not larger; bowels sometimes costive for a day or two, at other times the reverse; urine most frequently pale and copious, but on some occasions thick, scanty, and high-colored. Over the entire abdominal region a distinct pulsation could be heard and felt: but owing to the extreme excitability of the patient it was almost impossible to ascertain whether or not it was synchronous with the pulse. Palliative measures were adopted, and the case, now become one of painful interest, was closely watched. During the next fortnight no perceptible alteration occurred, except that the pulsation in the tumor became less distinct, and the abdomen more tense. Dr. Ferguson now visited the patient, and pronounced the abdominal pulsation
to be synchronous with the heart's action, and doubted whether impregnation had taken place at all. On his recommendation the author punctured the abdomen with a fine "trochar," and drew off about five pints of thick grumous and offensive matter. Great relief followed the operation, only, however, temporary; for in the course of a short time the abdomen became as tense as before, and all the patient's sufferings returned. The interest, in a further detail of the symptoms of this case, here ceases, no doubt now being entertained of its character. After a second and third tapping, the poor girl gradually got weaker and weaker, her only comfort the oblivion produced by anodynes; and on the 15th of February she died.

The day following, assisted by Mr. Druitt, a post-mortem examination was made. The upper portion of the body was extremely emaciated, but owing to slight œdema of the lower extremities, this appearance was not general. Abdomen greatly distended, and marked by enlarged veins; it measured in circumference fifty-eight inches. About a gallon of fluid was drawn off by the trochar, previous to making a free incision, after which nearly a pailful of brain-like matter rolled out.—This had been contained in a cyst, which extended from the pubis to the ensiform cartilage, and from the left to the right hypochondrium; in some parts the walls of the sac were more than an inch thick, and of a fibro-cartilaginous consistence; the anterior portion adhered firmly to the abdominal parieties, the upper being formed by the inferior surface of the liver; that organ was bathed with the contents of the sac, and became inoculated, several small cysts, filled with medullary sarcoma, having formed in its substance. There were, also, many isolated cysts, varying from the size of a hazel nut to that of a pigeon's egg, formed in the walls of the cyst; these had no connection with each other, or communication with the general cavity.—The uterus was found embedded in the lower portion or base of the cyst; no trace of the ovaries could be met with; the bladder was small, but not affected by disease.

The peculiar interest of this case arises from the close resemblance to the symptoms of impregnation; the development of a malignant disease seeming, in a great measure, to be influenced by the feelings or instinct of the patient. The author asks, would the girl have died had no connection taken place? How far did the mental and physical excitement act upon the origin or the progress of the disease? Or was it completely independent and its course inevitable?

[It is not improbable that the ovarian excitement, connected with the act of copulation, was the starting point of the disease.]
Treatment of Typhus or Ship Fever.—(New Jersey Med. Rep.)

Extract from a "Summary of, and Observations upon the medical practice of the New York Hospital, in the months of July, August, and September, 1847. By John H. Griscom, M. D., attending physician."

"The treatment of this disease was based upon the idea of its proximate cause being mainly a vitiated, deficient and innutritious condition of the blood. I say mainly because I have no particular theory as to the real nature of the disease, whether produced by a specific poison entering the system from without, as is maintained by some, or by a partial decomposition of the blood by others, or by a disorganization of the solids by a third party, etc. The most important point in my estimation to be considered, being its treatment, I have been disposed to look chiefly at its remote causes, and to endeavor to ascertain from a contemplation of them, what is required to overcome their effects.

"The remote causes are two in number: 1st, an insufficiency of food, and 2d, the inhalation of a vitiated air. The first of these must necessarily produce an exhausted neutrative condition of the blood;—that fluid, under a protracted privation of nutriment, will not only be diminished in quantity, but its red globules, it is reasonable to suppose, will become deficient in number and in those properties which are believed necessary to the health of the organism. Both these consequences are aggravated and increased by the second cause; for in the atmosphere of the steerage of a passenger ship, crowded to the utmost limit of the law, there must necessarily, one may easily believe, be not only a deficiency of oxygen, but an actual presence of other gases, whose chemical action upon the blood cannot but be deleterious, depriving it still further of its healthy properties.

"I may be told that this brief view of the causes and character of ship fever is insufficient to account for the febrile symptoms,—that there is nothing in starvation, or want of oxygen, or the presence of deleterious gases, to produce fever. If any one, who should raise this objection to the insufficiency of my position will tell us what fever is, I might then be able to discover a connection between it and the causes I have named. Until the specific nature of fever is demonstrated, it is in vain to argue about the nature of its causes, or to endeavor to trace the modus operandi of the influences which are supposed to produce it. But if we are to understand by fever, the frequent pulse, hot skin, thirst, etc., etc.,—then I answer, that ship fever, as it has been presented to us this year, is in very many instances, not a
fever at all. Repeatedly have we seen patients brought from on ship board without a single symptom of fever; with pulse below the natural standard, skin moist and cool, fauces not dry, no thirst, and yet the body covered with petechiae, the eye congested, the senses benumbed, and most of the other symptoms of the typhus condition.

"Confining our attention to this simple view of the causes of ship fever, we find little else to do than to counteract their effects. The means for this are clearly indicated, and may be classed under three general heads.

"1st. To maintain the continuity of the body, and sustain its nervous energy, by stimuli, until we are enabled,

"2d. To improve the quantity and character of the blood by appropriate nourishment; and

"3d. To oxygenize the blood thoroughly by pure air.

"For the first indication, after giving a warm bath, (an invariable rule, where it could be borne,) the most powerful and direct stimulants were found necessary. Brandy and carbonate of ammonia constitute the main reliance; and during my attendance I have been astonished to observe what enormous quantities of these remedies will be borne in this disease. As an instance, I may mention the case of a girl about 15 years of age, who took about 5 pints of brandy every day for 5 days, and for two weeks longer from 2 to 3 pints daily. At the same time she was taking 10 grains of carb: ammonia every 15 minutes, amounting to two ounces in twenty-four hours, besides soups and other nutriments. And all this without the least manifestation of excitement, or injury to the stomach or bowels, such was the intensity of the disease. She was under this treatment nearly three weeks, before any very decided symptoms of improvement were manifested; unfortunately, before time elapsed to observe the ultimate result in this case, and just as she was beginning to feel the good effects of the treatment, the patient had to be discharged 'relieved,' being removed from the hospital by her parents. Many other cases might be cited, in which it was necessary to continue, night and day, to ply these remedies unceasingly; a very short respite was frequently sufficient to put the patient back decidedly, and a vast number of the cures were undoubtedly due to the faithfulness with which these means were applied. Where the circulation was unusually languid, or the extremities were cold, sinapisms and artificial warmth were very valuable.

"To answer the second indication, the patients were fed at frequent intervals with nutritious soups, arrow-root, or gruel, with wine or brandy, milk punch, egg-nog, beef, chickens, etc.

"Upon the third indication, pure air, I may remark, that on
several occasions the necessity for it was strongly marked. The pressure for admission several times became so urgent, that the bounds of prudence were quite overstepped, as was indicated by the fact that in certain of the wards which were most crowded, and contained the worst cases, the recoveries became more protracted, and the relapses more frequent. It became necessary to close two of the wards in the north building, and to have them thoroughly cleansed and purified. After this operation, and upon confining the number of patients in them to a reasonable limit, a decided improvement was manifested in the rapidity of recoveries, and convalescence. The position of a patient's bed in a ward, was observed to have an influence over his treatment. In the corners of the rooms, the patients got along more slowly than in the central parts, or near the doors or windows;—and I frequently found that when a patient had been lying for several days, in a part of a ward most distant from the windows, and was not doing well, a removal of his bed right under a window would, in 24 hours, produce a decided change in the symptoms for the better.

"Although this was the general course of treatment, it was frequently varied to suit the condition of the patient. Occasionally a case would present a degree of excitement, with hot and dry skin and thirst, which called for the spirits mendereri, ice in the mouth and to the head, and the mildest diet; sometimes gastric irritation with nausea would demand a mild emetic, such as an infusion of eupat: perfol. If the pain and heat in the head were marked, dry cups to the temples, or forehead, or blisters behind the ears, and application of ice, would generally be found sufficient. Pneumonic symptoms with cough frequently complicated the case; when these occurred, Stoke's expectorant, with dry cups, or vesication of the chest, formed the principal addition to the other treatment.

"Sometimes there would occur such a combination of general prostration and external heat and dryness, as to indicate a combined stimulant and febrifuge treatment; such, for example as the administration of carb. ammon. or a half ounce of brandy, alternately every hour or two hours, with a half ounce of spirit Minder., and so frequent and sudden were the changes, in many instances, from one condition to the other, an almost constant watching was necessary to withhold the one or the other, and again resume it. In fact, the varieties and shades of symptoms were almost infinite, and called for an endless variation in the means of relief. To enumerate them would take more time and space than could be reasonably asked. There were many cases, however, for which no other treatment was necessary than good diet and cold water. Cleanliness, pure air, and food,
appeared all-sufficient for the removal of the disease, even in the well-marked cases, not a particle of medicine being administered to them."

On the Accidents which may result from the Employment of the Iodide of Potassium, and the best means of their Prevention.
By M. Rodet, Surgeon de l'Hospice de l'Antiquaille de Lyon. (Medico-Chirurg. Review.)

In the Review department of our last Number (p. 129), we have adverted to a paper by M. Cullerier, upon the ill effects occasionally resulting from the use of iodine; and M. Rodet's essay will be found to contain some very useful observations upon the causes and prevention of another class of these. Admitting the high claims of the medicine to attention, he sets out with protesting against the great abuse that has been made of it in French practice. The article is thrown into certain propositions, which it will be best to state in the author's own words:

"Proposition 1. In the physiological condition, the iodide of potassium exerts its action on certain special organs; and when this becomes pathogenetic, its effect is exerted upon one of these organs, or upon any organ which is already suffering, and is liable to an habitual irritation or fluxion."

All practitioners who have much employed this medicine in large doses, must have observed the excitement it imparts to certain organs or tissues, giving rise to increased appetite, a deeper colour of the mucous membranes, diuresis, &c.; and that in some cases this goes on to the production of irritation or inflammation, having certain special characters, and constituting forms of gastralgia, exanthemata, coryza, bronchitis, or nephritis, and a peculiar condition of the brain termed iodic intoxication. M. Ricord maintains that on the mere suspension of the medicine, all these symptoms soon disappear. Other practitioners have not been so fortunate, but have found themselves obliged to combat intense inflammation by active procedures. It is true that in such patients there frequently exists a peculiar predisposition.

"2. The iodide would rarely, if ever, produce serious ill effects, if it were only given in cases which evidently call for its employment." This is the general result of the author's observation, and in which he places the more confidence from its agreement with sound reasoning. When the cases have been properly selected, so far from its producing any ill effects, it has been borne even in enormous doses by the weakest and most irritable stomachs, and has exerted a powerful influence in re-
establishing that regularity of the various functions which constitutes health. Practitioners, seeing the really surprising cures it operates under these circumstances, have hastily generalized its application, by prescribing it in all the stages of syphilis, and in the most opposite diseases, and then are surprised at the disappointment which ensues. Convinced of its innocuousness, and awaiting the surprising effects they have led themselves to expect, they allow the mischief it produces to increase more and more, until at last the patient’s relief becomes a matter of great difficulty. It is no panacea, and its really remarkable specific effects are only to be expected in certain rare cases, which have been carefully discriminated.

“3. The iodide, as a general rule, is ill borne in cases in which the employment of mercury is indicated; so that, in place of being a succedaneum to this drug, it is only complementary to it.” The author well observes that, in spite of all that has been said against it, and the prejudices of the public, sometimes fostered by those of the profession, mercury is our most certain antidote against the venereal disease, and much mischief has resulted from the indiscriminate substitution of iodine for it. Mercury often fails, from the ineffectual mode in which it is administered; and the iodide then resorted to is given without hesitation in the most enormous doses. Experience has, however, confirmed the truth of M. Ricord’s observation, that mercury is inefficacious in proportion to the long-standing of the disease, while in the very same degree is iodine useful; but another fact which has not been remarked upon is, that the more powerful the agency of iodine against the morbid symptoms it is employed to relieve, the less capable it is of producing the iodic accidents; and, on the contrary, these are easily induced, just in proportion as it is powerless against the diseased conditions. Mercury suffices for the early stages of the venereal disease, and iodine for the latest, while for the medium ones a combination often best succeeds; but if the order be inverted, a train of accidents arise: mercurial, if the mercury has been too long persisted in; iodic, if the iodine has been prematurely employed. So much do these accidents resemble each other, that until recently they were all referred to the action of mercury; but the author has never seen either drug give rise to them, when the caution now recommended has been observed.

“4. The iodine acts so much the more favorably, if the patient have not been already treated by other measures. The fact of one or two mercurial courses having been recently undergone, should make us fear the production of iodic accidents, especially such as relate to the brain.” A most mischievous
error has been the admission of the claims of the iodide of potassium as an antidote of the mercurial cachexia. This has arisen from confounding syphilitic cachexia with mercurial cachexia, and from attributing to the influence of mercury the exostoses, caries, necroses, and large ulcerations, which are, in fact, but the consequences of an advanced stage of the disease. In proof of the truth of this observation the author remarks that,—(1) he has never seen iodine produce any mischief when employed against old syphilis in patients who had never undergone mercurial treatment; (2) the same remark holds good when the mercury had been employed at a very early period to combat the primary phenomena of the disease; (3) on the other hand, he has seen this medicine give rise to the most serious lesions when used shortly after the employment of mercury. Several cases observed by the author, or communicated by his friends, are cited in proof of this. The question then presents itself, as to how far the mercury may have been influential in inducing the accidents in question. It is somewhat difficult of solution, and may be best answered by examining the different categories of the cases. (1.) For the mercury, employed for the relief of secondary symptoms, the iodide was, after a longer or shorter period, substituted. Here the accidents may depend upon the absence of an indication for the use of iodine, an excited condition of the various organs produced by the mercury predisposing them to become easily irritated, or upon the combination of the mercury yet remaining in the tissues conferring on the iodine more active and irritating power. (2.) The patient was submitted to one or more mercurializations, more or less complete, for secondary symptoms, and iodine then employed for the treatment of a relapse. The same explanations may be adduced as in the former case; but it may be remarked, in reference to the latter portion of these, that although the opinion that mercury may remain accumulated in certain tissues for an indefinite period is evidently incorrect, yet it is certain that it may continue to influence the economy for some time after its use has been discontinued; and although the period required for the removal of this from the system cannot be determined, and is probably variable, yet the shorter the time which elapses between the discontinuance of the one drug and the commencement of the other, the greater is the danger of any ill effects resulting from their combination. (3.) The mercury was employed for the relief of tertiary symptoms, and iodine had recourse to after its failure. As here the iodine was indicated, the ill effects following its use must have chiefly arisen from some such combination adverted to. In some cases they seem to have depended upon the new irritation of the iodine having
checked some habitual secretion. "The cerebral symptoms resulting from the simple action of iodine differ from those which are produced by the combination of it with mercury. In the first case, as M. Baumès has already remarked, the patient complains of an uneasiness, giddiness, and heaviness of the head, rather than of a true headache. There is also a diminished power of hearing, sight, and recollection, and a difficulty or uncertainty in walking, accompanied often with diminished sensation and warmth in the legs. There is almost always constipation, but I have never seen any difficulty in passing water. In a word, the symptoms indicate rather an oppression of the brain than an inflammation of that organ. In the other case, the same symptoms exist, but there are likewise pain and congestion of the head, seeming to threaten a true inflammation of the brain."

**Means of prevention.** The precepts of the attainment of this end naturally flow from the consideration already bestowed upon the causes of the accidents in question.—1. *The iodide should never be administered except in cases which rigorously call for its employment.* This seems like the mere stating a truism; but the abuse of this medicine has been so great as scarcely to render it superfluous. It is sufficient for a dubious case to present itself, and the history of the patient, to exhibit the fact of syphilis having once existed, for a vitiation of the blood to be assumed, and this medicine at once given; and that in cases in which, were mercury the drug in question, much greater circumspection would be employed in prescribing it. It is the erroneous opinion of the inoffensiveness of the iodide, which has led to the great abuse made of it. In other cases, where syphilis is out of the question, it has been ordered because reputed to possess certain chemical properties, and because other means have failed. If this is no more successful, the dose is increased with a rashness observed with regard to no other remedy. Frequently it gives rise to irritation of the throat, which, mistaken for syphilis, leads to a still further abuse of the means that has caused it. The cases recorded in the journals of such wonderful cures in such opposite diseases, which are often but errors in diagnosis, have given the medicine a celebrity it does not deserve. With the exception of syphilis, the iodide can only be said to be advantageous in scrofulous diseases, and in glandular and other engorgements. In syphilis, when discriminately employed, it is truly an heroic remedy; but M. Rodet recommends us,—(1) never to employ it for primary symptoms, unless to fulfil some accessory indication; (2) never to employ it for secondary symptoms; (3) never at first to employ it for the mere symptoms of transition, and to asso-
ciate it with mercury only when this proves slow and uncertain in its operation; (4) always to employ it alone in tertiary affections at first, and afterwards, if it prove not efficacious enough, to associate mercury with it rather than give it in excessive doses.

2. Iodine must be employed with the more circumspection in proportion to the greater amount of mercury the patient may have taken, and as the epoch at which this has been taken is more recent. To prevent the mischief already pointed out, we should never give iodine, when mercury is still indicated and may be employed without fear; as it saturates the system, and induces consequent accidents. If mercury has already been taken at a recent epoch in large quantities, and it is feared to have recourse to it again, the chloride of gold, not the iodide of potassium, is the eligible substitute. In general, the patients are cured by its agency; and if its effects are not sufficiently favorable, we can discontinue it at the end of five or six weeks, and then have recourse to the iodine alone or conjoined with mercury; the system having had time to rid itself of the overdose of the mercury, and recover from the condition of excitement this may have produced. As might be expected, the gold gives rise to no accident, producing no injurious chemical reaction with the mercury or iodine. If the first mercurial treatment has taken place somewhat remotely, then may the new symptoms be treated either by mercury or iodine, according as they are secondary or tertiary, or in those of transition by the two combined; but in the use of iodine after mercury we should always proceed with much circumspection, and that in proportion to the shortness of the interval.

3. Whenever the disease for which iodine is given is complicated with inflammatory action of any organ, or by any other affection not directly dependent upon it, we should remove such complication before employing iodine. It must be acknowledged that frequently great difficulty exists, in distinguishing whether a given morbid condition or an organ arises from, or is independent of, the constitutional disease. Acute affections, as inflammations, cannot give rise to doubt. Their removal must be accomplished before commencing the special treatment. Sometimes, some habitual discharge is suppressed, such as sweating from the feet, epistaxis, hemorrhoids, &c. When this gives rise to the irritation or inflammation of some organ, the course to be pursued is obvious; but when there is only a feeling of general uneasiness, an abnormal condition of the system which requires only a slight cause to localize itself in some particular part, the administration of iodine may easily play the part of such occasional cause. Before having recourse to it,
therefore, we should endeavour to restore the deranged equilib-
rium by reproducing the fluxion.

4. The action of the iodine should be carefully watched; it
should never be given in larger doses than strict necessity re-
quires, and should be suspended as soon as it seems to excite any
deleterious effect upon the system. Even in small doses it pro-
duces very injurious effects in certain idiosyncrasies; while in
others, after having long tolerated it, the system suddenly re-
fuses to bear it. "But such intolerance is of far more frequent
occurrence, when it is given in too large doses, or continued too
long. The desire of producing prompt effects, and such as may
surprise the patient, has sometimes led to its being given from
the first in large doses. But the physician should always know
how to resist desires of this sort, and have nothing in view but
the true interest of the patient confided to his care. The dose
required varies surprisingly amid apparently identical condi-
tions, according to the idiosyncrasy of the patient; but we should
always commence with small ones, and only reach the large doses
sometimes required gradually, and when we have assured our-
selves of their necessity and of our patient's power of tolerating
them. As a general rule, M. Rodet commences with five or
six grains, augments the dose only weekly, doses not exceed
from two scruples to a drachm daily, or prolong the treatment
beyond two months. Cases in which larger doses and their
long continuance are required are exceptional, for which no
rules can be laid down, their management depending upon the
tact and skill of the practitioner.—Gazette Médicale, 1847,
Nos. 46, 47, 48.

We have seldom perused a paper with more satisfaction than
the above, replete as it is with sound principle and much-needed
cautions. Perhaps in the whole range of the materia medica,
there is not a drug that has been more rashly and preposterous-
ly prescribed than the one in question.

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Burnett's Disinfecting Fluid. (London Lancet.)

The chloride of zinc in solution, it appears from a para-
liamentary document which has just been issued, has been em-
ployed extensively as a disinfectant in dissecting rooms, the
wards of hospitals, and in the royal navy, and, according to the
reports which we have seen, has been eminently successful in
effecting the objects for which it is designed. The medical
officers at Chelsea Hospital state that it has been used in that
Hospital in the close-stools of patients affected with dysentery,
in the water-closets and cesspools, and also in the wards, when
the air was tainted by purulent expectoration or discharge from sores, with the effect of immediately removing the disagreeable odors. It has also been used in the surgery with good effect, in removing the smell of putrefying animal substances, and the odor of dead bodies under inspection; when employed as a dressing to ulcers, it removes the disagreeable smell of purulent matter, and, in the proportion of one part of the clear solution to eighteen of water, it preserves subjects of natural history from putrefaction, and in a fit state of anatomical inspection, after more than a year has elapsed. A similar testimony in favor of the solution of the chloride, is borne by the Assistant Surgeon of the Marine Hospital at Woolwich, who adds, "the great advantage which the chloride of zinc possesses over other agents employed for a like purpose, is, that it removes the disagreeable effluvium, without leaving one little less offensive in its room, and may therefore be made use of wherever this effect is required—in private as well as public buildings, in the sick bed-chamber no less than in the crowded ward. The method adopted, at this Hospital, is to supply each of the wards with a bottle of the diluted solution, which the nurses have directions to use whenever occasion may require, besides sprinkling it over the floors before the morning and evening visits are made."

Its utility in the dissecting-room is confirmed by the statements made by Mr. Bowman, Dr. Sharpey, Mr. Partridge, Dr. Murray and Dr. V. Pettigrew, who concur in asserting, that in a proper degree of dilution its success is complete, and that it appears to preserve the color and texture of the parts very admirably. It has, further, the very important advantage of not acting on the steel instruments employed, being in this respect equal to alcohol. Dr. Methven especially mentions an instance in which the solution corrected advancing putrescence, and enabled him to dissect during July. He believes, further, it will be the means of saving many valuable lives, which are annually lost by wounds received in the course of dissection, as, while dissecting this putrid body, he cut himself several times, and once received a punctured wound, without any bad consequences arising. Mr. M'Bain, of the "Mastiff," adds his testimony "to the rapid and perfect effects of the chloride of zinc solution upon animal matter in a state of putrefaction. Having frequent opportunities of dissecting or examining large fish, &c. cast on shore, whilst undergoing decomposition, the task has been occasionally any thing but agreeable, for want of a convenient power to destroy the putrefactive process. The chloride in these cases acts like magic; and as a great practical agent over one of the most important conditions of animal and vegetable matter—viz., putrefaction, it stands unrivalled." Its in-
fluence on board ship, in annihilating the offensive smell of bilge-water, and in sweetening between decks, is shown by the united evidence of captains, surgeons, and masters in the royal navy. Among other vessels it was used on board the "Victoria and Albert," royal yacht, to remove a more than ordinary stench of bilge-water, and other offensive odors, with most complete success. The surgeon states that she has remained comparatively sweet ever since, and when a bilge-water smell is occasionally perceptible, a slight application of the fluid removes it. The solution has also been used for very disgusting privies, &c., effluvia from which it quickly neutralizes.

Mr. Henderson, the Surgeon to the Dockyard at Portsmouth, has employed the fluid in a severe case of open cancer, the fætor from which was intolerable to the patient and attendants; this it destroyed so long as the dressings were kept moist therewith. Professor Quain has used it, he says, in the treatment of sloughing tumors with beneficial results, and he has no doubt it will supplant the chlorides of lime and soda altogether in the removal of foetid odor. Mr. Gibson, Surgeon of the "Euridice," employed it in a case of angry ulcer, in the proportion of one part to four of water. An eschar was the result, the separation of which left the ulcer in a healthy condition.

Several naval and other medical men have employed it as a disinfectant in hospitals, and on board ship, the general result being a marked diminution in the rate of mortality. Dr. Lindsay, Dr. Cronin, and Dr. Connor, of Cork, all bear testimony to its beneficial effects. Mr. Verling, Surgeon of the "Vengeance," thus speaks:

"Having used the chloride of zinc rather extensively on board Her Majesty's ship 'Vengeance,' whilst employed in the conveyance of troops, I think proper to report to you the result thereof. We carried the first battalion of the forty-second regiment, consisting of about 700 men, women and children, from Malta to Bermuda. Measles had prevailed epidemically in the regiment previous to their embarkation, but we received none on board laboring under the disease; yet, after being ten days at sea, several cases occurred simultaneously among the soldiers, and, on the 1st April, having been then a month at sea, the disease appeared among our own people, ten cases occurring on that day, and from that day to the 15th of the month, when we arrived at Bermuda, fresh cases were of almost daily occurrence, either among our own people or the troops. On getting rid of the troops, which we did at Bermuda, my attention was of course specially directed to every means whereby the contagion could be destroyed. Cleanliness and ventilation were duly attended to, and every part of the ship where the sick had
been, after being cleaned and aired, was sponged well over with the solution of chloride of zinc several times. Than the result, nothing could be better; the disease totally ceased, no fresh case occurring after. On our passage from Halifax, with the sixtieth regiment on board, the weather was so bad, and the ship working so much, that it was quite impossible to open any of the lower deck ports, on which deck the whole of the people lived, troops as well as our own people, for eight days; the air throughout the deck was exceedingly vitiated with every mixture of noxious smell, but the free use of the chloride of zinc tended, in a most surprising manner, to do away with the bad smell; so much so, that the surgeon of the regiment came to me to get some to use in the part of the ship were the ladies of the officers were. The effect of the chloride of zinc is most obvious in correcting all bad and offensive effluvia; and from the sudden and surprising manner in which the measles disappeared after its use, it is not, I think, too much to say, that it must have been very instrumental in decomposing the miasm, or state of atmosphere in the ship, which tended to the generation of the disease."

From all these statements, then, it is clear that the solution of the chloride of zinc is a powerful agent in neutralizing noxious gases, and in arresting the progress of decomposition. Sir W. Burnett has therefore rendered, by its discovery, a great benefit to suffering humanity. On board ship, its influence in removing the offensive odors from bilge-water can hardly be too highly estimated, while its action in sweetening the wards of hospitals, and destroying noxious and infectious effluvia, seems to be equally evident.

On the Internal Use of Nitrate of Silver in Obstructive Diarrhoea and Dysentery. By Thomas Aikin, Esq.—(Gazette Médicale.—Ranking's Abstract.)

The author of this communication remarks, that the topical application of the nitrate of silver to inflamed or ulcerated mucous surfaces is confessedly a most efficient mode of treating such cases. The knowledge of this fact may have induced physicians to employ the same remedy internally against disease invading the mucous surface of the hollow viscera. Accordingly, we find that ample testimony is afforded to the efficacy of the nitrate of silver in certain morbid conditions of the mucous coat of the stomach; but no English writer, Copeland excepted, (Dictionary of Medicine,) sanctions its employment as a therapeutic agent in morbid conditions of the mucous sur-
face of the intestinal tube. The author's object in the present communication is to adduce such testimony in favor of its salutary power in these affections as may stimulate further inquiry into the action of this salt in certain obstinate forms of diarrhoea and dysentery, which occasionally resist the action of the most esteemed remedies wielded in the ablest manner.

Boudin (Gazette Méd. No. 51, 1836,) physician to the Military Hospital at Marseilles, treated fifty cases of typhoid fever (dothinenteritis,) in most of which severe diarrhoea was the most prominent feature, with the nitrate of silver thus: When the lower portion of the intestinal tract was presumed to be the seat of ulceration, enemata, containing from one to three grains, dissolved in distilled water, were administered. In most cases one enema sufficed, the symptoms undergoing speedy amelioration. In other cases the remedy was given by the mouth, in half-grain doses every half hour, [?] formed into pills with gum tragacanth, or starch, until from two to four grains were thus taken. In some instances these two modes of treatment were combined: the results were that only two of the fifty cases succumbed. Examination showed "many ulcers" on the mucous membrane in a case of incipient cicatrization—"en voile de cicatrisation." There was evidence of the solution administered per rectum having passed the ileo-cæcal valve, and producing effects on the lower portion of the ileum precisely similar to those resulting from its action on the surface of the colon.

Kalt confirms Boudin's statement, having treated twenty-two cases of dothinenteritis with the nitrate of silver. Of these one died. He gave it in mixture (grs. ij. to vj. in decoct. salep. oz. vj.) a tablespoonful of which was taken every half hour, or hour, according to circumstances.

Hirsch of Königsberg (Hufeland's Journal) found the nitrate of silver to succeed in obstinate cases of diarrhoea on the failure of ordinary remedies. It proved specially useful in the diarrhoea of newly weaned infants. In "the advanced stage of such cases, when emaciation was extreme, the dejections being frequent, fetid, and consisting of a variously colored, sometimes greenish, or bloody mucus, and wanting altogether the fecal character. When aphthous ulceration pervaded the mouth, and when prostration was extreme, the action of the nitrate was brilliant." He gave it to children thus:

℞ Argent nitrat. crystal. gr. ¼.
Aqua destill. 3ij.
Gum mimosæ, 9ij.
Sacch. albi, 5ij.
Misc. Ft. mist.

A teaspoonful of this mixture was given every two hours, and an enema, containing a quarter grain of the salt, with mu-
cilage and a little opium, was administered. The good effects of this treatment were occasionally visible in a few hours, sometimes not until the second day. He pronounces it a specific in the diarrhœa of infants. He found it almost equally efficacious in severe forms of diarrhœa and dysentery occurring in adults. He administered it to the latter in pills, in doses varying from one-twelfth to one-twentieth of a grain every two hours. For this purpose he recommends liquorice powders as preferable to the vegetable extracts which effect its decomposition. He also gave enemata, containing half a grain or a grain, with mucilage and opium.

Canstatt also extols the nitrate of silver as prescribed by Hirsch in the diarrhœa ablactatio.

Since the author became acquainted with Hirsch's observations, opportunity presented for testing the powers of the nitrate of silver in a severe case of diarrhœa occurring in a child of a year old. Vomiting and purging set in, and continued with almost unabated intensity for five days. The stomach at length retained fluids in small quantities, but the purging continued. Chalk mixture, kino, opium, and acetate of lead were tried, and all, with the exception of the last, seemed to increase the irritation. The dejections were frequent, greenish, sometimes bloody, and very fetid. On the sixth day prostration was very great; there was a tendency to stupor, and quantities of greenish mucus were voided. Under these circumstances he gave the mixture as prescribed by Hirsch. The first dose seemed to increase the discharges; however, in about six hours, the character of the dejections were improved, they became feculent, and every symptom underwent a corresponding improvement.

Should the foregoing observations induce practitioners in this country to subject the action of the nitrate of silver in diseases of the mucous surface of the intestines to a more extensive trial, they may arrive at results confirmatory of those already obtained by the authorities which the author has quoted, and thereby extend the application of an agent of great therapeutic energy to forms of disease occasionally so intractable as to baffle the powers of ordinary remedies.

[The advantage of the nitrate of silver in the diarrhœa of infants, of which we have had considerable experience, is also acknowledged by Bouchart (Manuel Partique des Nouveaunés) and by Trosseau. We have given it frequently, and with much benefit also, in the "irritable" bowels of the adult. We generally prefer to exhibit it in solution, more especially in children, since, if given in pill or powder, we have no guarantee that it will not, by suddenly dissolving, exert all its effects, which, in
that case, may be too powerful, upon a circumscribed portion of the mucous membrane. This is a point which is not sufficiently attended to in prescribing the nitrate of silver for gastro-
dynia, and sufficiently accounts for the diversity of opinion respecting its benefit in this complaint. It may be readily con-
ceived that it makes all the difference whether half a grain of solid nitrate of silver lies in the corner of the stomach and dis-
solves, or whether originally in solution its action is distributed throughout the entire irritable mucous membrane.]

PART III.—MONTHLY PERISCOPE.

Remedies for Incontinence for Urine.—1. Benzoic acid has been employed with success against this complaint; it is given in doses of twelve grains daily, half in the morning and half in the evening, and the dose may even be doubled. M. de Fraene, of Brussels, records a successful case in a girl between 13 and 14 years of age, who was attacked with nocturnal incontinence, after recovering from a second attack of acute rheumatism. The complaint was neglected for several months; there was no pain in the part, the appetite was good, and the bowels regular, but the face was pale. Various remedies were employed without success, after which, two drachms of benzoic acid were made into forty pills, four of which were taken night and mor-
ning, and the complaint was completely cured.

2. A woman, aged about forty years, was received into the Hotel-
Dieu, under M. Guerard, to be treated for incontinence of urine and pulmonary emphysema. The first infirmity appeared to depend upon a phlogosis of the neck of the bladder. The urine passed involun-
tarily both night and day. The asthma was treated with acetate of ammonia. The emphysema was much ameliorated, the respiration became more easy, and the asthmatic attacks after a few days ceased.

The incontinence of urine, however, continued, for which enemata were ordered, containing four grains of camphor dissolved in yolk of egg, and mixed in a little water, so that it might be retained in the rectum. This treatment alone sufficed to remove the incontinence for some time. In a few weeks however, it returned, and was once more removed in the same manner. At present the enemata are continued as a prophylactic, the cure seems to be permanant.—[Prov. Med. and Surg. Jour.

Influence of the Weather Upon Health.—Dr. Casper, professor in the University of Berlin, in his essay on this subject, gives the follow-
ing practical conclusion: In Berlin, while the month of January is least, December is the most, favorable to health. The greatest num-
ber of deaths occur in spring, and the smallest number in summer. Extremes of temperature are dangerous to life. A high barometrical pressure tends to increase, while a low pressure tends to decrease,
the rate of mortality. The influence of atmospheric pressure on human life varies in different seasons. No condition of the air is so dangerous to life as dry cold. On the contrary, humid cold has the greatest tendency to support life. Of all seasons of the year, the winter gives rise to the greatest number of cases of inflammatory diseases, whilst the spring is most fatal to them, especially to cases of pneumonia. Cold winters, warm springs, summers, and autumns, increase the danger and fatality attendant on inflammation attacking the brain and respiratory organs, and vice versa. The maximum mortality from phthisis occurs in spring, and after this season in winter. The minimum mortality in autumn and winter. Variations in the state of the atmosphere appear to exert but little influence upon the relative number of deaths from phthisis. Nervous fever is most frequent and fatal in autumn—least frequent and fatal in spring. The influence of weather and season varies with the different periods of life. This influence is most marked in the ages of infancy and puberty, but it is least marked in the first septennial period of existence. From the twentieth year upwards, the winter is the most dangerous and the summer the most favorable season to life and health: and the older the individual the more striking is this difference.—[Med. Times.

Case of Anchylosis of the second and third Molar Teeth at a right Angle. By W. Grimshaw, F. R. C. S., Dentist.—The accompanying illustration exhibits a molar tooth which I extracted from the upper jaw of a lady about sixty years of age, who applied to me about two months ago, in order to have it removed. Upon attempting to bring it away I experienced a great deal of difficulty, so much so, that I felt persuaded that there was something very unusual connected with it. During the effort at extraction, the entire maxillary bone appeared to shake under the forceps. However, by proceeding with the operation in a very cautious manner, I gradually succeeded in removing the tooth. Upon examining it, I found that it had been anchylosed at the roots with another tooth, the dens sapientes of the left side, which joined it at a right angle, and created the difficulty attendant on its removal. In the course of my experience I have not met with an exactly similar specimen, nor have I read any description of such an occurrence in books on dental surgery, although I have frequently seen teeth joined together at their sides; it is not very uncommon to meet with primary teeth thus united.—[Dublin Journal.


Sir,—I beg leave to make known to the profession, through the pages of your Journal the discovery of a solution, which I have employed during the last six years, for preserving pathological specimens. It possesses the important advantages of causing such preparations to retain their colour perfectly unchanged, and it does not
harden the substance immersed in it. These two results are well instanced in several preparations in Jervis-street Hospital,—in particular preparations of the brain, showing apoplectic clot; apoplexy of the lung, and the recent appearances in stricture of the urethra.

The process I adopt is simply as follows:—In a quart of a saturated solution of alum in water I dissolved half a drachm of nitre; in this fluid I immerse the recent preparation, which soon becomes decolourized, but the colour gradually returns within a few days, the period, however, varying in different preparations. When the colour is thus completely restored, I put up the preparation in a filtered solution of alum. The specimens are open for inspection.

I remain your's, &c. &c.,

M. H. STAPLETON.

To the Editor of the Dublin Quarterly Journal, 16th Jan., 1848.

Means of detecting Blood spilt on Clothes.—Sulphuric acid dissolves the ligneous tissue of clothing without affecting the fibrin of the blood. Prof. Piria observes, that in these experiments, the fibrin forms a network so as to distinguish cloth upon which blood has been spilt.

[Journal de Chimie.]

MEDICAL INTELLIGENCE.

The American Medical Association—additional items of its proceedings.—We obtain the following particulars of the proceedings of the National Medical Association, assembled at Baltimore, from the Medical News and Library. They were prepared for that Journal and may be considered official, since the editor is chairman of the publishing committee. In addition to what has already been published, our readers have now a general view of what was done at the first annual meeting of the profession.

Resolved, 1st. That the assessment for the present year be three dollars.

2d. That voluntary contributions be invited.

3d. That a copy of the printed proceedings be furnished to such members only of the association as shall have paid the assessment for the year.

4th. That those members of the association who shall pay five dollars, instead of the assessment of three dollars, shall be entitled to three copies of the proceedings.

5th. That the committee on publication be authorized to make such arrangements for the sale of the transactions of the association as they may deem expedient, and to present copies to such public libraries, editors of medical journals, &c., as they may consider proper.

Resolved, That a committee of one from each State be appointed to report to this association at its session of to-morrow morning, the names of gentlemen to compose the various standing committees for the present year, and that such committee be instructed to present the names of such members only as are in actual attendance.

Dr. Wynn presented a communication from the medical department of the National Institute on the subject of hygiene, and offered a resolution that the communication be referred to a select committee of five, which was adopted, and the following committee was appointed:—Drs. J. Wynn, J. M. Thomas, O. W. Holmes, Isaac Parrish, and G. L. Corbin.

The committee appointed to nominate the standing committees, reported the following nominations, which were adopted.

Committee on Arrangements.—Drs. Jacob Bigelow, E. Hale, Z. B. Adams, Dalton, John Ware, O. W. Holmes, N. J. Bowditch, of Boston.

Committees on Medical Sciences.—Drs. L. P. Yandell, Ky.; Smith, Ohio; White, do.; E. S. Carr, Va.; S. Jackson, Penn.; Upshur, Va.; Harris, Tenn.

Committee on Practical Medicine.—Drs. Condle, Penn.; Gerhard, do.; Clymer, do.; John Ware, Boston; G. Tyler, D. C.; Fithian, N. J.; Kreider, O.

Committee on Surgery.—Drs. N. R. Smith, Md.; Askew, Del.; Baxley, Md.; Knight, Conn.; Hancock, Tenn.; McGuire, Va.; Shipman, Ind.


Committee on Medical Literature.—Drs. J. P. Harrison, Ohio; Breeze, do.; Edwards, Ill.; Latta, Ind.; Holmes, Mass.; Stewart, Md.; Thomas, D. C.


The committee also recommended the city of Boston for the next meeting of the association. The report was accepted, and the nominations confirmed.

Dr. W. Willford presented and read a report from the standing committee on Medical Education, accompanied with a series of resolutions, which were amended and adopted as follows:

1. Resolved, That this association considers defective and erroneous every system of medical instruction which does not rest on the basis of practical demonstration, and clinical teaching, and that it is therefore the duty of the medical schools to resort to every honorable means to obtain access for their students to the wards of a well regulated hospital.

2. Resolved, Therefore, That the association earnestly appeals to the trustees of Hospitals to open their wards for the purposes of clinical instruction, satisfied that they will thereby more efficiently aid the cause of humanity, and more perfectly accomplish the benevolent intentions of the founders of the charity.

3. Resolved, That the practice of appointing physicians and surgeons to the charge of an hospital on political, or other grounds, rather than those of professional and moral worth, is inconsistent with the welfare of its inmates, and of consequence, inhumane and unjust, subversive of the objects of its founders, and incompatible with a conscientious appreciation of the high responsibilities devolved on the appointing power.

4. Resolved, That this committee strongly recommend to the association, a practical observance of the resolutions appended to the report of the committee on preliminary education, and on the requisites for graduation, submitted to the medical convention, which assembled in Philadelphia, in May, 1847.

5. Resolved, That the faculties of the different schools be requested and advised to institute daily or weekly examinations of the pupils; that they be required to give lectures, and take such measures as may enable them to ascertain the regular attendance of the students upon the lectures up to the close of the term.

6. Resolved, That this association recommend to the faculty of each medical school to conduct the final examination of candidates for diploma, in presence of some official person or persons properly qualified to recognize the attainments of the candidate, but who has no pecuniary interest in the institution or in the number of its pupils.

7. Resolved, That it be also recommended, that, in view of the usual inaugural Thesys, or in addition thereto, each candidate for the diploma be required to present to the faculty, at or before the time of final examination, a report drawn up by himself and from his personal observation, of not less than six weeks, of the state of the disese, or the disease, of which he has been professionally examined.

8. Resolved, That the faculty of each medical school be requested, annually, and as early as possible, to furnish the chairman of the committee on education with a statement of the number of pupils and of graduates in their respective schools, together with such other information as may expedite the labours of the committee, and enable it to discharge the duties assigned by the constitution under which it acts.

Dr. Hayes asked permission to enquire whether it was the sense of the association in referring the minutes, reports of the standing committees, with the accompanying documents and other papers to the committee on publications, that these should be published entire or that the minutes should have discretionary powers?—when on motion it was resolved that discretionary powers be vested in the committee.

On motion of Dr. J. L. Atlee, a resolution was adopted, earnestly recommending to the physicians of those States in which State Medical Societies do not exist, to take measures to organize State Societies before the next meeting of the American Medical Association.

On motion of the committee, the report on the communication of the Medical Department of the National Institute, on the subject of hygiene, reported, recommending the appointment of a committee on hygiene, to consist of twelve members, to be appointed by the president, with power to fill vacancies. The following constitute this committee:—Drs. James Wynn, Balt.; Charles F. Gage, Concord, N. H.; J. M. Thomas, Washington, D. C.; Isaac Farnham, Phila.; P. C. Gaillard, Charleston; L. Y. Vandal, Louisville; J. F. Harrison, Cincinnati; A. Smith, Petersboro', N. H.; J. Currie, Louisville; E. H. Barton, N. G.; J. H. Griscom, N. Y.; 'Turner, N. C.'

Resolved, That in order to prevent the loss of time to the Association, the committee of arrangement be requested to sit on the day before the annual meeting, and that all members who arrive on that day be desired to present their credentials without delay.

On motion of Dr. G. L. Corbin, a committee of twelve was ordered to represent the association at the meeting of the British Association; and of the Prov. Med. and Surg. Association; and the following were appointed:—Dr. Geo. B. Wood, of Phila.; Jacob Bigelow, of Boston; and H. H. McGurie, of Winchester, Va.

On motion of Dr. Zulick, the members of the association were requested to transmit to the chairman of the appropriate standing committees, the histories of any important cases, which they may meet with in practice.

We have but a single comment to make on these resolutions; it is in reference to the justice or propriety of that one instructing the Committee, composed of one delegate from each State, to present the names of such members only as were in actual attendance. This, of course, excluded the many excellent and worthy members of the Association, who may have been absent from unavoidable circumstances, from participating in the preparations for the next annual meeting.
To the Editor of the Southern Medical and Surgical Journal:

Dear Sir,—I perceive that you have transferred to the pages of your valuable Journal of the 1st of June, certain strictures upon Dunglison's Practice of Medicine, originally published in the New Orleans Medical and Surg. Journal. I have carefully compared the parallel columns intended to establish the serious allegation of plagiarism preferred against the learned professor, and I must confess that I do not find the charge sustained. The candid reader cannot fail to perceive that the language of the extracts is not identical in both, and that if the ideas seem to correspond, such must always be the case when different authors have to treat a subject, admitting very little scope for the play of imagination. The symptoms of a well understood disease must always be alike, and it ought not to be considered strange that different writers will enumerate the same, and often in nearly identical language. Common charity should therefore lead us to attribute such correspondences of expression rather to the nature of the subject and to coincidence than to premeditated imitation. If this be plagiarism, there will be found very few authors exempt from it when describing well known things or facts. You would find instances of it in every page on anatomy and symptomatology, on chemistry, physics, &c. We have all sins enough for which we should be held accountable, without having to bear the brunt of those we have not committed, and this is especially the case with Prof. Dunglison, whose extraordinary propensity for book-making has so often led him to the labor-saving use of scissors. One of the most striking illustrations of this may be found in the author's Human Physiology, a considerable portion of which is a translation verbatim et literatum of Adelon's "Physiologie de l'homme." The fact here mentioned attracted my attention long since, and would have been then publicly noticed had I not preferred leaving the ungrateful office to others who might have more taste for denunciation. Nor would I even now do violence to my feelings, were it not for the desire to relieve the author from the charge of plagiarism where it cannot be clearly demonstrated, and to place him upon the grounds he has chosen for himself. Let us see the relation which the Human Physiology bears to the work of Adelon; and to do this the respective works may be compared at almost any chapter. I open at random the second volume of Dunglison's work, 1st edition, published in 1832, and at page 25 find the section on "The absorption of Lymph." The same subject is treated by Adelon, in the 3d vol. of his second edition, published in 1829. The following parallels speak for themselves:

"The lymphatics consist of two planes—the one superficial, the other deep-seated. The former creeps under the outer covering of the organ, or of the skin, and accompanies the subcutaneous veins. The latter is seated more deeply in the interstices of the muscles, or even in the tissue of parts, and accompanies the nerves and great vessels. These planes anastomose with each other. This arrangement occurs not only in the limbs, but in the trunk, and in every viscus. In the trunk, the superficial plane is seated beneath the skin; and the deep-seated between the muscles and the serous membrane that lines the splanchnic cavities."

"Ils marchent sur deux plans, l'un superficial, qui rampe sous la peau ou sous la membrane qui enveloppe l'organe, et qui accompagne les veines superficielles et sous-cutanées; l'autre profond, qui est situé plus profondément dans les interstices des muscles, ou dans le tissu même des parties, et qui accompagne les artères. Des anastomoses existent entre ces deux plans. Cette disposition ne se remarque pas seulement dans les membres; elle a lieu dans chaque viscère, et dans le tronc lui-même, où l'on voit le plan superficial des vaisseaux lymphatiques au-dessous de la peau, et le plan profond entre les chairs et la membrane sèreuse qui tapisse les cavités splanchniques."
"The lymphatics have been asserted to be more numerous than the veins; by some, indeed, the proportion has been estimated at fourteen superficial lymphatics to one superficial vein; whence it has been deduced, that the capacity of the lymphatic system is greater than that of the venous. This must, of course, be mere matter of conjecture."

"It has been a matter of some interest to determine whether the lymphatic vessels have not other communications with the venous system than by the two trunks just described; or, whether, soon after their origin, they do not open into the neighboring veins;—an opinion, which has been enunciated by many of those who believe in the doctrine of absorption by the lymphatics exclusively, in order to explain why absorbed matters are found in the veins. Many of the older, as well as more modern, anatomists have professed a similar opinion.

"Vieussens affirmed, that, by means of injections, lymphatic vessels were distinctly seen to originate from the minute arteries, and to terminate in the small veins. Sir William Blizard asserts that he twice observed lymphatics terminating directly in the iliac veins. Ribes, by injecting the supra-hepatic veins, saw the substance of the injection enter the superficial lymphatics of the liver. Alard considers the lymphatic and venous systems to communicate at their origins. Vinch Fohmann, that the lymphatic vessels communicate directly with the veins, not only in the capillaries, but in the interior of the lymphatic glands. Lauth, of Strasbourg,—who went to Heidelberg to learn from Fohmann his plan of injecting,—announced the same facts in 1824.

"By this anatomical arrangement, Lauth explains how an injection, sent into the arteries, reaches the lymphatics, without being effused into the cellular tissue; the injection passing from the arteries into the veins, and thence, by a retrograde route, into the lymphatics. Beclard believed, that this communication exists at least in the interior of the lymphatic glands; and he supported his opinion by the fact, that in birds, in which these glands are wanting, and are replaced by plexuses, the lymphatic vessels in these plexuses are distinctly seen to open into the veins. Lastiy, in 1825, Regolo Lippi, of Florence, in his Illustrazioni Plzio-

"Les lymphatiques sont, dit-on, plus nombreux que les veines; on dit qu'il y a quatorze lymphatiques superficiels pour une veine; d'où l'on établit que la capacité du système lymphatique est supérieure à celle du système veineux. Mais, d'abord, il est impossible de préciser la capacité de chacun de ces systèmes."

"Une importante question est celle de savoir si les vaisseaux lymphatiques n'ont pas, dans le système veineux, d'autre abouchement que par les deux troncs que nous venons de décrire; ou si, au contraire, ces vaisseaux, chemin faisant, et dès leur origine, s'ouvrent dans les veines qu'ils aboutissent. Nous avons annoncé que beaucoup de secteurs de l'absorption exclusive par les lymphatiques, afin de pouvoir expliquer pourquoi les matières absorbées se retrouvent dans les veines, avaient émis cette dernière opinion; et, en effet, beaucoup d'anatomistes anciens et modernes la professent. Vieussens, par exemple, dit avoir reconnu, à l'aide d'injections, que des vaisseaux lymphatiques naissent des parois des dernières artérioles et vont aboutir aux parois des dernières veines. Blizard assure avoir vu deux fois une terminaison directe de lymphatiques dans les veines iliaques. Ribes, en injectant les veines sus-hépatiques, a vu la matière de l'injection pénétrer dans les vaisseaux lymphatiques superficiels du foie. Alard qui, dans l'ouvrage que nous avons cité plus haut, n'a pas l'absorption veineuse, fait de la communication des systèmes lymphatique et veineux à leur origine la base de toute sa théorie. En 1820, un anatomiste de Heidelberg, M. Fohmann, a annoncé que les vaisseaux lymphatiques communiquaient directement avec les veines, non-seulement dans leurs premiers plexus, dans leurs plexus capitaillers, mais encore dans l'intérieur des ganglions lymphatiques. Il a été suivi en cela par M. Lauth de Strasbourg, qui, était allé en Allemagne prendre de M. Fohmann son procédé d'injection, et qui a annoncé les mêmes faits dans sa dissertation à l'école de Strasbourg en 1824: par cette disposition anatomique, M. Lauth explique comment une injection pousse dans les artères arrive dans les lymphatiques, sans s'être épanchée dans le tissu cellulaire; l'injection a passé des artères aux veines, et de celles-ci par voie rét., rograde aux lymphatiques. Beclard pensait que cette communication exist-
logiche e Pathologice del Sistema Linfatico-chilifero, has made these communications the express subject of his work. According to him, the most numerous exist between the lymphatic vessels of the abdomen and the vena cava inferior and all its branches. So numerous are they, that every vein, according to him, receives a lymphatic vessel, and the sum of all those vessels would be sufficient to form several thoracic ducts. Opposite the second and third lumbar vertebrae, these lymphatic vessels are manifestly divided into two orders;—some ascending, and emptying themselves into the thoracic duct; others descending and opening into the renal vessels and pelves of the kidneys.

"Lippi admits the same arrangement, as regards the chyliferous vessels; and he adopts it to explain the promptitude with which drinks are evacuated by the urine."

"Subsequent researches do not seem to have confirmed the statements of Lippi. G. Rossi, indeed, in Omodeo's Annals for January, 1826, maintains, that the vessels, which Lippi had taken for lymphatics, were veins. The question is still sub lite."

"Chaussier includes, in the lymphatic system, certain organs, whose uses in the economy are not manifest,—the thymus gland, the thyroid gland, the supra-renal capsules, and perhaps the spleen. These he considers as varieties of the same species, under the name glandiform ganglions."

ait au moins dans l'intérieur des ganglions, et il appuyait son opinion sur ce que dans les oiseaux, où les ganglions manquent et sont remplacés par des plexus, on voit distinctement dans ces plexus les vaisseaux lymphatiques s'ouvrir dans les veines. Enfin, en 1825, M. Lippi de Florence a publié sur l'anatomie des vaisseaux chylifères et lymphatiques, un travail dans lequel cette communication est encore plus complètement annoncée; il ne s'agit plus en effet d'anastomoses, rares, à l'aide de vaisseaux capillaires, et cachées dans l'intérieur des ganglions, mais de communications établies par le moyen de gros vaisseaux. Selon M. Lippi, il existe les communications les plus nombreuses entre les vaisseaux lymphatiques de l'abdomen et la veine-cave inférieure et toutes ses branches, veines lombaires, spermatiques, sacrée moyenne, veine azyzgos, etc.; ces communications sont à tel point multiplies, que toute veine reçoit un vaisseau lymphatique, et que la somme de tous ces vaisseaux lymphatiques formerait plusieurs canaux thoraciques. Au niveau des deuxième et troisième vertèbres lombaires, ces vaisseaux lymphatiques se partagent manifestement en deux ordres, les uns ascendants, qui vont aboutir au canal thoracique, les autres descendants, qui vont s'ouvrir dans les veines rénales et dans les bassinets des reins. Nous avons déjà dit que M. Lippi admettait sur tous ces points des dispositions semblables dans les vaisseaux chylifères, et qu'il s'en était servi pour expliquer la promptitude avec laquelle les boissons sont évacuées par l'urine."

"Les recherches qu'on a faites depuis la publication du travail de cet anatomiste n'ont pas confirmé les faits qu'il avait annoncés; M. Rossi a soutenu que les vaisseaux que M. Lippi avait pris pour des lymphatiques n'étaient au contraire que des veines; la question reste encore en litige parmi les anatomistes."

"M. Chaussier considère comme appartenant aux ganglions lymphatiques, un certain nombre d'organes dont les usages dans l'économie ne sont pas encore bien connus, tels que le thymus, la thyroïde, les capsules surrenales, et peut-être la rate; il en fait une section à part, sous le nom de ganglions glandiformes."
"The thymus gland is a body, consisting of distinct lobes, situated at the upper and anterior part of the thorax, behind the sternum. It belongs more particularly to fcetal existence, and will be investigated hereafter.

"The thyroid gland is, also, a lobular organ, situated at the anterior part of the neck, beneath the skin and some subcutaneous muscles, and resting upon the anterior and inferior part of the larynx, and the first rings of the trachea. It is formed of lobes, which subdivide into lobules and granula; has a red and sometimes a yellow colour; and presents, internally, vesicles, filled with a fluid, which is viscid and colourless or yellowish. It has no excretory duct; and, consequently, it is difficult to discover its use. It is larger in the fcetus than in the adult; and has, therefore, been supposed to be, in some way, inservient to fcetal existence. It continues, however, through life, receives large arteries, as well as a number of nerves and lymphatics, and hence, it has been supposed, fills some important office through the whole of existence. This, however, is all conjecture."

"Lastly, the supra-renal or atrabiliary capsules or glands, are small bodies in the abdomen, without the peritoneum, and above each kidney. The arteries, distributed to them, are large; and the glands themselves are larger in the fcetus than in the adult. They, likewise, remain during life. These bodies consist of small saes, with thick, parenchymatous parietes; are lobular and granular; the internal cavity being filled with a viscid fluid, which is reddish in the fcetus, yellow in childhood, and brown in old age."

"Le thymus est un corps formé de cinq à six lobes distincts, situé dans le thorax, à sa partie supérieure et antérieure, derrière le sternum, et qui, appartenant plus particulièrement au premier âge de la vie, sera décrit à l'article du fœtus. La thyrôide est un organe, lobulaire aussi, situé à la partie antérieure du col, au-dessous de la peau et de quelques muscles sous-cutanés, appuyé sur la partie antérieure et inférieure du larynx et les premiers anneaux de la trachée-artère. Formé de lobes qui se divisent successivement en lobules et en grains, cet organe a une couleur tantôt rouge, tantôt jaune, et présente internièrement des vésicules remplies d'un fluide qui est visqueux et incolore ou jaunâtre. On a dit qu'il servait à secrèter le mucus bronchique; mais jamais on n'a pu lui trouver un canal excréteur. Comme il est plus volumineux dans le fœtus que dans l'adulte, on peut le croire destiné plus particulièrement à quelques fonctions nutritives relatives à cet âge; cependant sa persistance jusqu'à l'extrême vieillesse, le volume énorme des artères qui lui arrivent, ainsi que le nombre des nerfs et vaisseaux lymphatiques qui le pénètrent, ne permettent pas de douter qu'il ne remplisse aussi, dans tout le cours de la vie, quelque office important, mais inconnu."

"Nous en dirons autant des capsules surrénales, petits corps placés dans l'abdomen, hors du peritoneum, au-dessus de chaque rein dont ils emmêlent l'extrémité supérieure: les artères qui y aboutissent ont aussi plus de volume chez le fœtus que chez l'adulte; mais comme ces organes persistent pendant toute la vie, on ne peut les croire inutiles. Ils consistent en de petites poches à parois parenchymateuses épaisse, dont le tissu est aussi lobulaire, granulé, et dont la cavité interne est pleine d'un fluide visqueux, qui est rougeâtre dans le fœtus, jaune dans l'enfance, et brun dans la vieillesse."

"D'abord, il est deux manières de s'en procurer: ou bien l'on ouvre plusieurs vaisseaux lymphatiques par une sorte de lymphée, comme Semminger l'a fait une fois au pied, et l'on recueille le fluide qui en sort; ou bien, l'on fait jeûner quatre à cinq jours un animal, et quand on presume qu'il ne se fait plus de chyle par suite de l'abstinence, on cueille l'animal, et on recueille le fluide qui est dans le canal thoracique, et qu'on suppose devoir être alors de la lymphpure."

"Lymph may be procured in two ways, either by opening a lymphatic vessel, and collecting the fluid, that issues from it,—but this is an uncertain method,—or by making an animal fast for four or five days, and then obtaining the fluid from the thoracic duct. This has been considered pure lymph."
"The fluid, thus obtained, is of a rosy, slightly opaline tint, of a marked spermatic smell, and saline taste. At times, it is of a decidedly yellowish colour; and, at others, of a madder red; circumstances, which may have given occasion to erroneous inferences, in experiments, made on the absorption of colouring matters. Its specific gravity is, to that of distilled water, as 1022.28 to 1000.00. Its colour is affirmed to be more rosy, in proportion to the length of time the animal has fasted. When examined by the microscope, it exhibits globules like those of the chyle; and, like the chyle, bears considerable analogy, in its chemical composition, to the blood. When left at rest, it separates into two portions;—the one, a liquid, nearly like the serum of the blood; and the other a coagulum or clot of a deeper rosy hue; in which a multitude of redish filaments appear, disposed in an aborescent manner; and, in appearance, very analogous to the vessels, which are distributed in the tissue of the organs,"

"Mr. Brande collected the lymph from the thoracic duct of an animal, which had been kept without food for twenty-four hours. He found its chief constituent to be water; besides which, it contained muriate of soda and albumen;—the latter being in such minute quantity, that it coagulated only by the action of galvanism. The lymph of a dog yielded to Chevreul, water, 926.4; fibrine, 4.2; albumen, 61.0; muriate of soda, 6.1; carbonate of soda, 1.8; phosphate of lime, phosphate of magnesia, and carbonate of lime, 0.5."

"It is impossible to estimate the quantity of lymph contained in the body. It would seem, however, that notwithstanding the great capacity of the lymphatic vessels, there is, under ordinary circumstances, but little fluid circulating in them. Frequently, when examined, they have appeared empty, or pervaded by a mere thread of lymph. Mogendie endeavored to obtain the whole of the lymph from a dog of large stature. He could collect but an ounce and a half; and it appeared to him, that the quantity increased, whenever the animal was kept fasting."

"Voici les propriétés physique qu'elle présente: c'est une liquide diaphane, incolore, peu odorante et peu sapide selon les uns; qui, selon les autres, a une couleur rosée, légèrement opaline, une odeur de sperme fort prononcé, une saveur salée; qui est légèrement visqueuse, essentiellement albumineuse, et dont le pesanturé spécifique est supérieur à celle de l'eau distillée; le rapport de l'une à l'autre est comme 1022,28, à 1000,00. Sa couleur, dit-on, est d'autant plus rosée, que l'animl sur lequel on l'a prise a plus jeûné. Examinée au microscope, elle offre les mêmes globules que ceux qui composent le sang, sinon qu'ils sont plus petits, et non revêtus de l'enveloppe colorente. Dans sa composition chimique, elle a beaucoup de ressemblance avec le sang. Abandonnée à elle-même, elle se partage comme lui en deux parties: 1° une liquide, qui est un sérume à peu près semblable à celui du sang; 2° une solide, qui est un caillot d'un rose plus foncé, formé de filaments rougâtres, ressemblant à des arborisations vasculaires, et composée aussi comme le caillot du sang."

"M. Brande, qui le premier a fait l'analyse de la lymphe, dit qu'elle est de l'eau tenant en dissolution un peu d'albumine, de chlorure de sodium, et un peu de soude. Dans 1000 parties de lymphe retirée à un animal à jeun, M. Chevreul a trouvé: eau, 926,4; fibrine, 004,2; albumine, 061,0; muriate de soude, 006,1; carbonate de soude 001,8; phosphate de chaux, de magnésie, et carbonate de chaux, 000,5."

"Quant à la quantité de la lymphe, il n'est guère possible de l'évaluer.—Comment pourroit recueillir toute celle qui remplit le système lymphatique? Peut-être cette quantité est-elle moins considerable qu'on ne l'a supposé d'après la grande capacité du système lymphatique et le grand nombre de vaisseaux de ce système? En effet, beaucoup de ces vaisseaux paraissent être vides le plus souvent, ou n'être parcourus que par un mince filet de lymphe. Une expérience particulière de M. Mogendie porte aussi à l'croire. Ce physiologiste cherchant à recueillir toute la lymphe d'un chien de forte taille, n'en a guère obtenu qu'une once et demi: il lui a paru que cette quantité augmentait toutes les fois qu'on soumettait l'animal à l'abstinence."
“At one period, the lymph was considered to be simply the watery portion of the blood; and the lymphatic vessels were regarded as the mere continuation of the ultimate arterial ramifications. It was affirmed, that the blood on reaching the final arterial branches, separated into two parts; the red and thicker portion returning to the heart by the veins; and the white, serous portion passing by the lymphatics. The reasons for this belief were, the great resemblance between the lymph and serum of the blood; and the facility with which an injection passes, in the dead body, from the arterial, into the lymphatic capillary vessels. Magendie has revived the ancient doctrine; and, of consequence, no longer considers the lymphatics to form part of the absorbent system; but to belong to the circulatory apparatus.”

“This system consists of myriads of vessels, called veins, which commence in the very textures of the body, by what are called capillary vessels; and from thence pass to the great central organ of the circulation—the heart.

“The origin of the veins, like that of all capillary vessels, is imperceptible. By some, they are regarded as continuous with the capillary arteries; Malpighi and Lewewnoek state this as the result of their microscopic observations on living animals; and it has been inferred, from the facility with which an injection passes from the arteries into the veins. According to others, cells exist between the arterial and the venous capillaries, in which the former deposit their fluid and whence the latter obtain it. Others, again, substitute a spongy tissue for the cells.

“A question has also been asked,— whether the veins terminate by open mouths; or whether there may not be more delicate vessels, communicating with their radicles,—similar to the exhalants, which are presumed to exist at the extremities of the arteries, and are the agents of exhalation.

“All this is, however, conjectural.”

“Avant la découverte du système lymphatique, les Anciens regardaient la lymphe comme n’étant que la sérosité du sang. Il en fut de même encore dans les premiers temps de la découverte de ce système, lorsqu’on disait que les vaisseaux lymphatiques n’étaient que la continuation des dernières artérioles. On établissait que le sang, arrivé aux dernières ramifications des artères, se partageait en deux parties: une rouge, plus consistante, qui était rapportée par les veines; et une blanche, séreuse, qui était rapportée par les lymphatiques. Les preuves sur lesquelles on se fondait étaient la ressemblance apparente qui existe entre la lymphe et la sérosite du sang, et la facilité avec laquelle une injection édaverique passe des dernières artérioles dans les premiers radi- cules des lymphatiques. Dans cette manière de voir, qui est encore celle de M. Magendie, qui nie l’absorption lymphatique, l’histoire de la lymphe ne devrait pas se rapporter à la fonction des absorptions, mais à celle de la cir- culation.”

“II se compose, chez l’homme, de vaisseaux nombreux, appelés veines, qui, commençant dans l’intrigue de toutes les parties du corps, dans laquelle, au lieu deartere, se portent depuis ces lieux divers où se font les absorptions internes, jusqu’à l’organe central de la circulation, le cœur.”

“Leur origine dans la profondeur des parties nous échappe. Selon les uns, les veines sont continues aux ramifications dernières des artères; Malpighi, Lewewnoek, par exemple, croient l’avoir remarqué dans leurs observations microscopiques sur les animaux vivants. On l’ait aussi d’après la facili- té avec laquelle une injection passe d’une artère dans une veine, facilite qui est plus grande ici qu’en tout autre vaisseau. Selon d’autres, au contraire, il y a, entre les artéries dernières et les premières veineuses, de cellules, un parenchyme spongieux, dans lequel les premières déposent des sucs et où les dernières en pompent d’autres. Le doute ici tient à l’impossibilité où nous sommes de respirer la texture des sys- temes capillaire, comme nous l’avons déjà dit à l’article des lymphatiques, et comme nous le dirons encore à celui de la circulation. Les veines commen- cent-elles, comme les lymphatiques, par des radicules beaux aux diverses surfaces? Ou ont-elles à leur origine
"When the veins become visible, they appear as an infinite number of tubes, extremely small, and communicating very freely with each other; so as to form a very fine net-work. These vessels gradually become larger and less numerous, but still preserve their reticular arrangement; until, ultimately, all the veins of the body empty themselves into the heart, by three trunks."

"In their course towards the heart, particularly in the extremities, the veins are divided into two planes,—one subcutaneous or superficial; the other deep-seated, and accompanying the deep-seated arteries. Numerous anastomoses occur between these, especially when the veins become small, or are more distant from the heart."

"Leaving the organ, we find them situated between the laminae of the dura mater; when they take the name of sinuses. In the splanchnic cord, they are extremely tortuous, anastomose repeatedly, and form the corpus pampiniforme; around the vagina, they constitute the corpus retiforme; in the uterus, the uterine sinuses, &c."

"The veins have three coats in superposition. The outer coat is cellular, dense, and very difficult to rupture. The middle coat has been termed the proper membrane of the veins. The generality of anatomists describe it as composed of longitudinal fibres, which are more distinct in the vena cava inferior than in the vena cava superior; in the superficial veins than in the deep-seated; and in the branches than in the trunks."

"The difficulty of arriving at any exact conclusion, regarding the relative capacities of the two systems, is forcibly indicated by the fact, that whilst Borelli conceived the preponderance in favour of the veins to be as four to one; des vaisseaux plus delies, charges d'effectuer l'absorption, de même que les artères en arrivent, à leur terminaison, charges d'effecuter l'exhalation nutritive? Encore une fois, tout cela ne peut être présente que comme conjecture."

"A partir de cette origine, les veines, quand elles commencent à être visibles, se présentent sous forme de canaux très tuns, communiquant tous les uns dans les autres, et constituant un réseau très dense. Elles cheminent de là en formant successivement des ramescles, des rameaux, des branches, des troncs, en un mot, des canaux de plus en plus gros et de moins en moins nombreux, et en se dirigeant du côte du cœur, dans l'oreillette droite duquel elles finissent par aboutir par trois troncs."

"Dans le long trajet qu'elles ont à parcourir, elles affectent deux plans: un profond, qui est contigu aux artères et se distribue comme elles; et un superficiel, qui se dessine sous la peau, et sous l'enveloppe de chaque organe: de très fréquentes anastomoses les unissent. Ces anastomoses s'étendent des veines superficielles aux veines profondes."

"Du reste, ces veines offrent presque toutes des particularités dans chaque partie du corps; par exemple, au cerveau, elles aboutissent toutes aux sinuses de la dure-mère; au cordon splanchnique, elles sont très flexueuses, anastomoses très fréquemment entre elles, et forment ce que nous verrons y être appelé le corps pampiniforme; autour du vagin, elles forment le corps réiforme; dans l'utérus, les sinus utérins, etc."

"Enfin, les veines sont composées de trois membranes superposées les unes aux autres et unies entre elles par de la cellulosite. 1° La membrane extérieure est celluleuse, et n'est guère qu'une condensation du tissu cellulaire environnant, de ce tissu jette dans l'intervalle des parties pour en remplir les vides. 2° Au-dessous est la membrane propre des veines, qui adhère beaucoup à la première."
SAUVAGES estimated it at nine to four; HALLER at sixteen to nine; and KEIL at twenty-five to nine. 410

“Toutes les veines qui reviennent dans l'abdomen se réunissent en un gros tronc qu'on appelle veine-porte; celle-ci, ensuite, au lieu de se rendre à une veine plus grosse à la veine cave inférieure, par exemple, va se ramifier à la manière d'une artère dans le tissu du foie, et de ce foie naissent alors d'autres veines appelées sus-hépatiques qui se rendent à la veine cave inférieure, mais qui proviennent autant des artères du foie que des rameaux de la veine-porte. Cette exception bien remarquable, et sur l'utilité de laquelle on a fait mille conjectures, ne porte que sur les veines des organes digestifs situés dans l'abdomen, la rate, le pancréas, l'estomac, l'intestin, les épiploons; les veines de tous les autres organes de l'abdomen, des reins, de la vessie, des capsules surrenales, des organes génitaux, des parois abdominales, y sont étrangères.”

“D'une odeur fragrance d'ail ou fade, sus generis, d'une saveur légèrement salee d'une chaleur egale à celle du corps humain, visqueux au toucher, coagulable, et d'une pesanteur specifique superieure à celle de l'eau distille.”

“C'est surtout à l'étude de ce fluide qu'a ete applique le microscope: le sang examine avec cet instrument a paru compose d'un vehicule sereux, dans lequel sont en suspension de petits globules rouges, sur la forme desquels les observateurs ne sont pas d'accord, et dont le volume d'ailleurs n'est pas le même dans les animaux.”

“Ce fluide extrait des vaisseaux qui le contiennent, et abandonne à lui-même d'abord exhale, pendant tout le temps qu'il conserve sa chaleur, une vapeur formee d'eau et d'une matière animale putrescible.”

“Ensuite il se coagule en degageant une grande quantite de gase acide carbonique. Ce degagement n'est manifeste quand le sang est laisse à l'air libre, que par les canaux qui en resultent dans l'intérieur du coagulum; mais on en recueille le produit en plaçant le sang sous le recipient d'une machine pneumatique, ou l'on a fait le vide.”

quatre c'est-à-dire qu'il a plus du double de capacite; HALLER comme seize à neuf, ce qui est un peu moins du double; KEIL comme vingt-cinq à cinq, ce qui est les quatre cinquièmes.”

“Toutes les veines qui reviennent des organes digestifs situés dans l'abdomen se réunissent en un gros tronc qu'on appelle veine-porte; celle-ci, ensuite, au lieu de se rendre à une veine plus grosse à la veine cave inférieure, par exemple, va se ramifier à la manière d'une artère dans le tissu du foie, et de ce foie naissent alors d'autres veines appelées sus-hépatiques qui se rendent à la veine cave inférieure, mais qui proviennent autant des artères du foie que des rameaux de la veine-porte. Cette exception bien remarquable, et sur l'utilité de laquelle on a fait mille conjectures, ne porte que sur les veines des organes digestifs situés dans l'abdomen, la rate, le pancréas, l'estomac, l'intestin, les épiploons; les veines de tous les autres organes de l'abdomen, des reins, de la vessie, des capsules surrenales, des organes génitaux, des parois abdominales, y sont étrangères.”

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Other parallels may be found by comparing Dunglison, vol. 2d, pp. 46, 47, 57, and vol. 1st, at pp. 461, 463, 465, 467, 468, with Adelon, vol. 3, p. 117 and vol. 2, pp. 394, 397, 401, 409, 410.

These comparisons will, perhaps, explain the wonderful facility with which the author manufactures books, for it appears that he not only quotes the views of Adelon, but continually appropriates his quotations. A reputation for medical lore is thus acquired with but little trouble. Prof. D. must certainly put a very low estimate upon the erudition of his readers. The medical profession of the United States have a right to feel indignant at a practice which the learned gentleman would certainly never have ventured in his own country.

X. Y. Z.

Amputation under Chloroform.—Dr. E. C. Jones, of Madison, Ga., writes us under date May 22d, that he had amputated the leg of a negro man, aged 45, while the patient was under the influence of chloroform. The operation was performed in the presence of the medical gentlemen of the place, and the anaesthetic effects of the preparation were of quite a satisfactory character.

The Bill prohibiting the importation of adulterated Drugs, has passed Congress. The medical profession of the United States are chiefly indebted to the Apothecaries of New-York, and to Dr. Edwards, member of Congress from Ohio, for the passage of a bill imposing heavy penalties upon the importation into this country of spurious chemical and pharmaceutical preparations for the Materia Medica.

Honourable Fees.—We were recently called into consultation with the Professor of Obstetrics, &c., in the Medical College of Georgia, to attend a lady in puerperal convulsions. When the case terminated, a Bank check, signed by the husband, who is a member of our Bar, with the amount left blank, was sent to each of us.

Another.—We learn that a Surgeon in Savannah, having operated successfully on the son of a lady in that city, had, besides his usual fee, a splendid case of surgical instruments presented to him by the grateful mother. These are truly green spots in the arid professional path, and we have to regret they are so far apart.

To remove Writing Ink.—Writing Ink, says the Pharmaceutical Journal, can be removed by a solution of muriat. ac. and chlor. sod., and made to reappear by a solution of ferro-cyanide of potassium.—[Annalist.

Isopathia—something rich in Medicine.—From the prolific brains of the Germans, we have again another theory of medicine—it is this: the disease of an organ is to be cured by taking as physic the analogous organ of some healthy animal; thus inflammation, or a deficiency either, of the brain is cured by eating asses' brain, or the brain of an ape—disease of the liver by swallowing goose's liver, &c., &c. Here is the similia similibus and the curantur with a vengeance. Alas! what a rich consolation for the drooping spirits of Homeopathists, &c., &c.
### MEDICAL MISCELLANY.

**Ages of some of the Parissian Professors.**—Pelletan 66, Rostan 58, Piorry 52, Blardin 50, Croquet 58, Velpeau 53, Dubois 53, Trousseau 47, Dumas 48, Gerdy 51, Bouillaud 52, Royer Collard, 46, Berard 50.

M. Laugier has been the successful candidate in Paris for the place of the late Prof. A. Berard,—Clinical Surgery in the School of Medicine.

**Thirty Doctors** of the 900 representatives to the National Convention of France have been elected. Profs. Trousseau and Gerdy are among the number.

A woman at Hertford, in England, aged 64, has recently been delivered of a child. She had had eleven children, the last at 53 years old. The case seems to be well authenticated.

In 1847, 12,927,643 pounds of tea, and 150,332,992 pounds of coffee were consumed in the United States.

The name of the Hospital of Louis Philippe of Paris, has been changed to that of Hospital of the Republic.

Dr. Angelo Dubini states in the Bulletin General de Therapeutique for April, that chloroform will preserve subjects. He even says the form, flexibility, volume and color will be retained by it.

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### METEOROLOGICAL OBSERVATIONS, for May, 1848, at Augusta, Ga. Latitude 33° 27' north—Longitude 4° 32' west Wash. Altitude above tide 152 feet.

<table>
<thead>
<tr>
<th>Date</th>
<th>Sun Rise</th>
<th>Sun Set</th>
<th>3, P. M.</th>
<th>Wind</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>29 90-100</td>
<td>66</td>
<td>29 87-100</td>
<td>N. W.</td>
<td>Rain last night 77 1/4-100.</td>
</tr>
<tr>
<td>60</td>
<td>&quot; 71-100</td>
<td>80</td>
<td>&quot; 55-100</td>
<td>S. W.</td>
<td>Cloudy.</td>
</tr>
<tr>
<td>59</td>
<td>&quot; 59-100</td>
<td>78</td>
<td>&quot; 67-100</td>
<td>S. E.</td>
<td>Fair.</td>
</tr>
<tr>
<td>59</td>
<td>&quot; 64-100</td>
<td>80</td>
<td>&quot; 65-100</td>
<td>S.</td>
<td>Scudding clouds.</td>
</tr>
<tr>
<td>66</td>
<td>&quot; 73-100</td>
<td>81</td>
<td>&quot; 79-100</td>
<td>S. W.</td>
<td>Flying clouds.</td>
</tr>
<tr>
<td>64</td>
<td>&quot; 80-100</td>
<td>88</td>
<td>&quot; 83-100</td>
<td>S. W.</td>
<td>Fair.</td>
</tr>
<tr>
<td>65</td>
<td>&quot; 75-100</td>
<td>88</td>
<td>&quot; 66-100</td>
<td>N. W.</td>
<td>Fair.</td>
</tr>
<tr>
<td>66</td>
<td>&quot; 64-100</td>
<td>80</td>
<td>&quot; 56-100</td>
<td>W.</td>
<td>Fair—flying clouds—dry gale.</td>
</tr>
<tr>
<td>66</td>
<td>&quot; 62-100</td>
<td>82</td>
<td>&quot; 65-100</td>
<td>W.</td>
<td>Cloudy—breeze. [25-100.</td>
</tr>
<tr>
<td>61</td>
<td>&quot; 61-100</td>
<td>74</td>
<td>&quot; 52-100</td>
<td>W.</td>
<td>Thunder storm at 1, p.m.—rain</td>
</tr>
<tr>
<td>54</td>
<td>&quot; 59-100</td>
<td>66</td>
<td>&quot; 55-100</td>
<td>W.</td>
<td>Cloudy—shower at 4-100.</td>
</tr>
<tr>
<td>49</td>
<td>&quot; 60-100</td>
<td>63</td>
<td>&quot; 70-100</td>
<td>N. W.</td>
<td>Fair—flying clouds—gale.</td>
</tr>
<tr>
<td>56</td>
<td>&quot; 82-100</td>
<td>72</td>
<td>&quot; 85-100</td>
<td>W.</td>
<td>Fair—breeze.</td>
</tr>
<tr>
<td>55</td>
<td>&quot; 86-100</td>
<td>82</td>
<td>&quot; 66-100</td>
<td>W.</td>
<td>Fair—rain at 1, p.m.</td>
</tr>
<tr>
<td>55</td>
<td>&quot; 90-100</td>
<td>81</td>
<td>&quot; 92-100</td>
<td>E.</td>
<td>Fair to 12 M.—thunder shower</td>
</tr>
<tr>
<td>60</td>
<td>&quot; 94-100</td>
<td>78</td>
<td>&quot; 92-100</td>
<td>S.</td>
<td>Fair—breeze.</td>
</tr>
<tr>
<td>60</td>
<td>&quot; 87-100</td>
<td>82</td>
<td>&quot; 84-100</td>
<td>S. E.</td>
<td>Fair—some clouds.</td>
</tr>
<tr>
<td>59</td>
<td>&quot; 83-100</td>
<td>82</td>
<td>&quot; 84-100</td>
<td>S. E.</td>
<td>Fair—some clouds.</td>
</tr>
<tr>
<td>61</td>
<td>&quot; 87-100</td>
<td>70</td>
<td>&quot; 87-100</td>
<td>E.</td>
<td>Cloudy—thunder, shower 74-100.</td>
</tr>
<tr>
<td>61</td>
<td>&quot; 79-100</td>
<td>76</td>
<td>&quot; 70-100</td>
<td>E.</td>
<td>Cloudy—sprinkle.</td>
</tr>
<tr>
<td>63</td>
<td>&quot; 67-100</td>
<td>82</td>
<td>&quot; 61-100</td>
<td>S. W.</td>
<td>Cloudy.</td>
</tr>
<tr>
<td>63</td>
<td>&quot; 61-100</td>
<td>86</td>
<td>&quot; 59-100</td>
<td>S. W.</td>
<td>Fair—some flying clouds.</td>
</tr>
<tr>
<td>66</td>
<td>&quot; 62-100</td>
<td>86</td>
<td>&quot; 59-100</td>
<td>S. W.</td>
<td>Rain 25-100.</td>
</tr>
<tr>
<td>63</td>
<td>&quot; 66-100</td>
<td>86</td>
<td>&quot; 63-100</td>
<td>S.</td>
<td>Cloudy—rain 30-100.</td>
</tr>
<tr>
<td>66</td>
<td>&quot; 72-100</td>
<td>82</td>
<td>&quot; 75-100</td>
<td>S.</td>
<td>Cloudy—thunder.</td>
</tr>
<tr>
<td>68</td>
<td>&quot; 77-100</td>
<td>76</td>
<td>&quot; 68-100</td>
<td>S.</td>
<td>Rain—thunder, &amp;c. 60-100.</td>
</tr>
<tr>
<td>65</td>
<td>&quot; 76-100</td>
<td>76</td>
<td>&quot; 79-100</td>
<td>E.</td>
<td>Cloudy—sprinkle and blow.</td>
</tr>
<tr>
<td>69</td>
<td>&quot; 80-100</td>
<td>69</td>
<td>&quot; 80-100</td>
<td>N. E.</td>
<td>Rain—storm, 1 inch 40-100.</td>
</tr>
<tr>
<td>68</td>
<td>&quot; 67-100</td>
<td>83</td>
<td>&quot; 63-100</td>
<td>E.</td>
<td>Fair at 3, p.m.—rain in morn'g.</td>
</tr>
<tr>
<td>68</td>
<td>&quot; 59-100</td>
<td>84</td>
<td>&quot; 55-100</td>
<td>S.</td>
<td>Cloudy—rain last night 20-100.</td>
</tr>
<tr>
<td>67</td>
<td>&quot; 60-100</td>
<td>82</td>
<td>&quot; 63-100</td>
<td>E.</td>
<td>Fair.</td>
</tr>
</tbody>
</table>

13 Fair days. Quantity of Rain 3 inches 90-100. Wind East of N. and S. 10 days. West of do. do. 15 days.