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THE
PENINSULAR
JOURNAL OF MEDICINE

AND

THE COLLATERAL SCIENCES,

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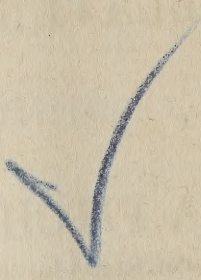
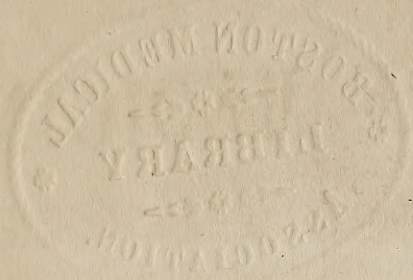
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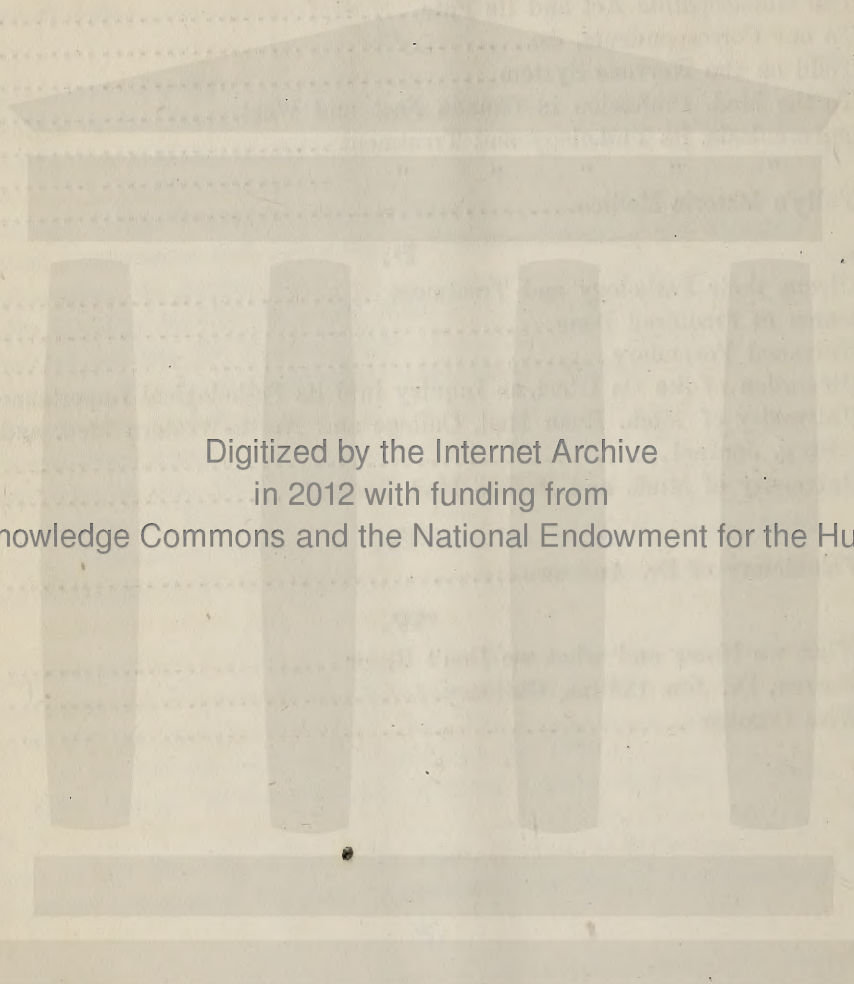
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PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. III.

JULY, 1855.

NO. I.

ORIGINAL COMMUNICATIONS.

ART. I.—*Transactions of the Michigan State Medical Society.—
Third Annual Meeting, held at Ann Arbor, March 29th, 1855.*

(*Concluded from page 561.*)

It was moved and carried that a committee of three be appointed to ask of Dr. Stewart, for publication, a copy of the Address to the Graduating Class of the Medical College of the University—the Society having been present and listened to the address with much pleasure. The chair appointed Drs. Brodie, H. Taylor, and E. Andrews.

Dr. Robinson presented the following communication from the medical profession of the city of Detroit :

At a meeting of the Medical Profession in the city of Detroit, March 26, 1855, to express their views relative to the creation of a Professorship of Homœopathy in the Medical Department of the University of Michigan, by an act of the Legislature at its late session, the following resolutions were unanimously adopted :

Resolved, 1st, That we deem the act of the Legislature a reflection on the fidelity and good sense of the Board of Regents, whose duty it is to provide for the best interests of the Medical Department of the University—they being endowed with the general su-

pervision of the University, and the direction and control of all expenditures from the University interest fund.

Resolved, 2d, That we deem it an insult to the profession of Medicine, and to the Professors of the Medical Department of the University in particular, by imposing upon them the necessity of association with the veriest fallacy of the age, and by bringing into disrepute the plan hitherto pursued, viz: that of a faithful study of the Science of Medicine, founded upon an inductive course of examination and proof, and which has received the approbation of the soundest principles of common sense.

Resolved, 3d, That we consider the appointment of a Professor of Homœopathy not only an insult to the University, but an outrage to the common sense of the community, by expending the funds of the Institution intended for the advancement of Science and Art, for the promulgation of absurdity and folly.

Resolved, 4th, That the Delegates of the Detroit Medical Society be requested to lay the above resolutions before the State Medical Society, at its convocation on the 29th inst., at Ann Arbor, and request an expression on the subject from that body.

JAMES A. BROWN, *Pres't.*

WM. BRODIE, *Sec'y.*

Dr. Beech moved that a committee be appointed to draft resolutions expressive of the sense of the Society on the subject presented in the resolutions from Detroit, and that they be instructed to report at the evening session. The motion was carried, and the chair appointed Drs. Andrews, Brodie, H. Taylor, Stockwell and Batwell.

Dr. Brodie offered the following preamble and resolution:

Whereas, The Peninsular Medical Journal, in its publication during the past year, has met the approbation of this Society, it is hereby

Resolved, That the Transactions of this Society be published in said Journal, and that all funds in the treasury not otherwise appropriated, be paid to the publishers of said Journal for that purpose.

The resolution and preamble were carried.

Dr. Brodie moved that the Delegates to the American Medical Association be instructed to use their influence to have the meeting of that body for 1856, held in Detroit, which motion was carried.

The following Delegates were then elected, with the power of choosing their own substitutes, viz :

Prof. DENTON, of Ann Arbor,

Dr. BEECH, of Coldwater,

“ BRODIE, of Detroit.

“ STOCKWELL, of Port Huron,

“ TAYLOR, of Mt. Clemens,

“ BACKUS, of Jackson,

“ ROBINSON, of Detroit,

“ STEBBINS, “

Dr. M. K. Taylor was by vote continued chairman of the committee on Meteorology.

The Medical Faculty of the University was continued as committee on prevailing diseases.

Dr. E. Christian was appointed a committee on New Remedies.

Drs. Palmer, Andrews, and Brodie were appointed publishing committee.

On motion, the Society adjourned until eight o'clock P.M.

EVENING SESSION.

The Society was called to order by the President, and the committee appointed to prepare a response to the communication of the Medical Profession of Detroit, reported the following preamble and resolutions :

Whereas, the Medical Profession of Detroit has passed resolutions condemning in strong and clear language, the attempt which the Legislature has made to force an unnatural union of quacks with physicians in the Medical College of the University of Michigan, and forwarded a copy of the same for our concurrence—therefore,

Resolved, That the State Medical Society approves of the action of the Medical Profession of Detroit on that subject. Also,

Resolved, That since the Regents of the University have ever shown both the desire to advance, the wisdom to understand, and the ability to defend the interests of the whole University; and since the Constitution of the State lodges all power of appointing and paying Professors in their hands alone, rendering Legislative interference impossible, we have no fear that they will ever destroy the Institution by attempting to mingle hostile elements in its bosom.

Resolved, That we will stand by the Regents and the Faculty so long as they stand by their honor and their duty, and that we will in all parts of the State bring our influence to bear on the right side of this question, not doubting that the truth which we hold will conquer.

The preamble and resolutions were unanimously adopted.

On motion, the Society adjourned until the next annual meeting.

E. ANDREWS, *Secretary*.

APPENDIX

To the Transactions of the State Medical Society.

ANN ARBOR, March 29th, 1855.

DR. MORSE STEWART:

Dear Sir:

The members of the State Medical Society, having listened with great pleasure to your address delivered to the graduates of the Medical Department of the University of Michigan, by a unanimous vote the undersigned were appointed a committee to respectfully solicit a copy for publication with its Transactions.

W. M. BRODIE, M. D.
HENRY TAYLOR, M. D. } *Committee.*
E. ANDREWS, M. D.

DETROIT, April 10th, 1855.

Gentlemen:

Your letter of the 29th ult. communicating the vote of the State Medical Society, requesting a copy of my address before the Medical Department of the University of Michigan, for publication in its Transactions, was duly received.

In reply, I can only say that the address was designed to point out to young men, entering upon their career of medical practice, some traits of excellence of character which it is of superior importance to the physician to note and carefully cultivate, in order to fulfill well the duties of his office; and as it contains nothing new,

or that has not been often before and better said, it has seemed to me scarcely worthy of publication.

But the compliment which the State Society has paid to it, I did not at all anticipate, and I know not how I can in courtesy deny the request.

I therefore, without further apology, transmit with this a copy of the address for the Society's disposal.

I am, very respectfully, yours &c.

MORSE STEWART.

To WM. BRODIE, M. D.

HENRY TAYLOR, M. D.

E. ANDREWS, M. D.

Committee.

VALEDICTORY ADDRESS

To the Graduates of the Medical Department of the University of Michigan. Delivered at Ann Arbor, March 29th, 1855.

GENTLEMEN GRADUATES: The occasion on which you are gathered to-day, is one calculated to excite in you emotions both joyous and sad. After a protracted noviciate, the appropriate allotment of which has been passed in the Medical Department of this University, you have been thought worthy of its honor, and to-day have received the degree of Doctor of Medicine.

To engage in studies congenial, without care of any kind to interrupt the harmony of feelings which results from such a privilege, has been your happiness, during these few years of your professional minority. Your probationary period, must, therefore, have been delightful to you, and I wonder not that you cast an eye backward with some longing for a renewal of its joys.

This day, too, is an era in your life; for it is both the close of your adolescence and the morn of your manhood. As such, it casts its shadow on your feelings, bringing with it the reflection that the pleasant memories of the past are all that remains to you of its dear delights, while the sadness of the thought is made only more impressive by the solicitude and anxiety of mind with which you anticipate the cares and sober responsibilities of the future.

But a deeper shade rests upon you, I know, than is wont upon like occasions—a shade of melancholy, as here arrayed, your ser-

ried ranks tell of the destroying Angel's work, and the fitting shadows of your late companions pass in review before the eye of memory. It is sad to witness death under any circumstances; but when the grim messenger demands his victim from among those in whom the freshness and buoyancy of youth, added to the vigor of full health, gave promise of long life; and in whom, too, mental culture had so far matured that manhood had already stamped its impress on the soul, the spectacle excites our most tender sympathies, and from the deep fountain within us issues the o'erflowings of sorrow.*

With feelings such as these your hearts, I can imagine, are now full; and as, at such a time, the thought of bidding adieu to this your Alma Mater is forced upon you, the unbidden tear you can scarce restrain.

But quickly the starting tear is dashed from your cheek—as if to rebuke a weakness which your manhood cannot brook—and then, to sustain your pride in its resistance to the softer feelings of the heart, you call to mind the thought of having achieved the first object of your manly ambition, and attained to the high honor of a Degree, both of merit and of privilege, in an honorable profession. Joy at the thought of returning to dear homes and dear hearts with this honor conferred upon you, swells the soul.

Entering into your sympathies—for I am a brother with you, and although by some few years your senior, yet memory of a like event in my own history is fresh in mind—I sorrow and rejoice with you, and thus for a few minutes give way to the emotions which the occasion excites.

But, gentlemen, turn we from emotions and feelings to the consideration of the sober realities of the future, upon which you are preparing to enter. You have made choice of a noble profession: that you may appreciate its dignity and the honor conferred upon you by admitting you to its fellowship, should now be your aim.

Coming among you, as we do, from the cares and pressing duties of active professional labors, to greet and give you cheer upon your introduction to the rank which you this day take—we feel that we cannot do you better service, than to devote the time which we are to occupy, to words of counsel regarding your character and conduct

* Reference is here had to the death, from small pox, of some members of the class, during the progress of the lecture term.

for the future. For this purpose, bear with us while we attempt to portray some of the prominent features in the character of the cultivated and noble-minded physician, which we commend for your imitation, trusting that it may be both your pride and your purpose to attain unto the completeness of a symmetrical character.

The Science of Medicine comprehends, in general terms, *Anatomy*, *Physiology*, and *Pathology*; or, in other words, the knowledge of the structure and functions of our bodies, both in a state of health and of disease: *Hygiene*, or that department of science which relates to health, and embraces a knowledge of all the causes whose influences are, either directly or indirectly, mischievous in their tendency upon it, as well as the means necessary for its preservation. It supposes therefore, a knowledge "of every condition of the atmosphere;" also, "all varieties of clothing, food and drink; all actions and passions of the mind; and every state of the body and of its individual organs, as to wakefulness or sleep, action or repose"—and thus comprehends Meteorology and Geology, *Dietetics*, *Psychology* and *Physiology*; *Materia Medica*, and *Therapeutics*, or the knowledge of medicinal substances, animal, vegetable and mineral, together with their physiological, botanical and chemical history and relations, as also their various effects upon man in health and sickness; and lastly, *Medical Jurisprudence*, the object of which is "to aid the cause of justice by the detection and exposure of fraud and crime."

The practice of medicine, is the application of the laws of medical science, chiefly, in the preservation of health and the cure of disease. Its subjects are mankind in general, in all the varieties of situation and circumstance in which they are found.

Such a profession, so wide in its scope, so dignified by the varied learning which it supposes, and so ennobling in its effects upon mind and heart of him who, as an honest, humble searcher after truth, explores the fields of nature which it opens to view; and having, in its practical application, so noble a purpose to subserve as the cure of manifold diseases, healing the wounds and allaying the pains incident to human life, deserves well to be ranked among the liberal and honorable professions. To even higher rank has it been admitted, by leading minds in other departments of learning. "It has been assigned, by one of the greatest ornaments of the legal profession, Sir William Blackstone, pre-eminence for general and exten-

sive knowledge; and one of the most learned philologists of his day, Dr. Parr, has remarked: 'While I allow that peculiar and important advantages arise, from the appropriate studies of the three liberal professions, I must confess, that in erudition and science, and in habits of deep and comprehensive thinking, the pre-eminence, in some degree, must be assigned to physicians.' "

This, gentlemen, is the profession you have chosen; and the labor, toil, weariness, watchfulness and anxiety, which it implies, must also be your voluntary choice. Be it now your purpose to fit yourselves for your high duties, and the life of self-denial which is before you. And if it be your aim to attain to a high professional character, bear in mind, first of all, that, as you pass beyond these college walls, your student life is not to end; but, on the contrary, daily study must be your habit through life.

The knowledge of the healing art is ever advancing. Each year adds new material to the large amount already accumulated, and it is only by constant application, that the mind can gather up and make familiar new facts and new discoveries. The Science of Medicine, too, is so extensive, that the most zealous and laborious learner will always find the field enlarging before his view. It has been remarked that "Excellence in any department can now be attained only by the labor of a lifetime; it is not to be purchased at a lesser price." How important then it is, that he who aims at excellence here, and who would be thoroughly fitted for the duties of professional life, should give to medicine, constant application and earnest thought. Says Sir Joshua Reynolds, "nothing is denied to well-directed labor—nothing is to be attained without it." And if you would live nobly, be content to toil assiduously and unremittingly in patient, careful study, not from ambitious motive, least of all for a temporary reward; but to achieve some lasting good for mankind. "In a luxurious age," says a modern British author, "comfort or station is deemed the chief good of life; in a commercial community, money becomes the universal object of ambition. Thence our growing weakness in the higher branches of literature. Talent looks for its reward too soon. Genius seeks an immediate recompense; long protracted exertions are never made; great things are not done, because great efforts are not made; none will work now, without the prospect of an immediate return. Very possibly it is so; but then let us not hope or wish for immortality.

‘Present time and future, are rivals : he who solicits the one must expect to be discountenanced by the other.’ It is not that we want genius : what we want, is the great and heroic spirit, which will devote itself by strenuous efforts to great things, without seeking any reward but their accomplishment.” This is the spirit which we commend for your imitation.

We remark in the next place, that an essential qualification to the physician, is the spirit of benevolence. This, to a certain extent, is a principle natural to man. The first prompting of the heart when called to witness distress or suffering in a fellow being, is to extend sympathy and relief. But like the faculties of the mind, our feelings are susceptible of cultivation and improvement, or the opposite, just as, on the one hand, we cherish and seek to refine and strengthen them not only by yielding to their longings when in a right direction and confined within legitimate boundaries, but even by seeking out appropriate objects and occasions upon which to exercise them ; or as, on the other hand, we give way to our selfish tendencies, and care not to know, or are indifferent to the situation and circumstances of those around us. The physician, especially, has need to keep a watch upon himself, lest selfishness gain ascendancy over him. With him, the cultivation of an earnest love of our humanity, should be a *fixed principle*. For he, who, more than other men, is called to see human nature in the lowest degradation ; whose services often are brought into requisition, to remedy the evils which physical and moral defilement have induced ; whose faithful attendance upon such, is not unfrequently met with ingratitude, and it may be abuse, will have to struggle, not only with the ordinary selfishness of man, but also with the indignation which virtuous feeling always has towards vice, in the cultivation of the spirit of benevolence. Yet, to perform well the duties of his office, the genial influences which flow from this virtuous feeling are indispensable. For to cure disease, it is often necessary to soothe, and allay the nervous excitement which feeds it, and which, no human means, save human sympathy and kindness, can do. Man, when suffering from disease, must be regarded by the physician, as *man*, disconnected from all associations of a disagreeable, or disgusting nature, his leading purpose being to cure his disease, and, as far as lies in his power, remove the cause even if it exists in depraved and vicious habits, and thus to restore him to society and usefulness.

Very different from the views here expressed, is the sentiment which commonly prevails among men. To be hardened to the sufferings of others is often thought proper and needful to the physician. It is, by some, regarded evidential of extraordinary fitness for medical practice, that he should be devoid of the common sensibilities; indeed, the benumbing of the feelings is thought to be a *necessary* result of a practice, which calls to witness and often to occasion so much suffering among men.

Be not led astray by this common mistake. The physician and surgeon is not by any necessity of his calling, hard hearted and indifferent to the suffering he witnesses, since to witness pain, or even to occasion it, for the purpose of curing or relieving the suffering patient, *fosters* the tender sensibilities of the heart, and refines our human sympathies. It *may* be otherwise, and, no doubt, often is; for, if avarice, or ambition be the motive which prompts to the choice and practice of medicine, the love of self is exalted above the love of our neighbor; the claims of humanity are wholly lost sight of, and the sympathies of the man are dried up before the scorching, withering influence of the dominant purpose of the soul.

Cultivate, then, this noble virtue. Start upon your career of practice, deeply imbued with the benevolent character of your profession, and with the determination to maintain its character, and that its honor shall ever remain unsullied by any selfishness on your part. Engage in the practice of medicine, not as a means to enrich yourself, nor even as a *mere* livelihood, but with the high purpose of devoting your life to usefulness. Let it be your aim to do good to others as you have opportunity, and an approving conscience will sustain and comfort you—a better recompense, far, than money, for the labor and anxiety you must endure. So shall ye be classed among “physicians of that nobler kind,” who

“Join with care and skill,
A temperate judgment, a devoted will;
Men who suppress their feelings, but who feel
The painful symptoms they delight to heal;
Patient in all their trials, they sustain
The starts of passion, the reproach of pain;
With hearts affected, but with looks serene,
Intent they watch through all the solemn scene,
Glad if a hope should rise from nature’s strife,
To aid their skill and save the lingering life;
But this must virtue’s generous effort be,
And spring from nobler motives than a fee.”

But if from sordid motives you have chosen this profession and determined to practice it, you may succeed in your purpose; yet will not the happiness, which the higher incentive brings, attend you—and though you may receive your reward, yet if the vicissitudes of life, should suddenly dissipate your accumulated wealth, or blast your ambitious hopes forever, from whence could you look for consolation?

We remark again, that *discretion* is a leading feature in the character you emulate.

Good judgment and prudence, are justly esteemed among men as second only to probity of character. The position which high birth, wealth and learning give, is of little worth, without these qualities; for they are indispensable to a man's influence, whatever his position or rank may be. And to the physician, they are especially important, both as a guide in the treatment of disease, and as a constant and wise counsellor in his professional and social intercourse.

The physician possessed of these, when standing by the bedside of his patient, examines his symptoms and studies his case, both as to its nature and treatment, by a common sense application of the principles of medicine, with which he has made his mind familiar by thought and study. He may not always be regarded a philosopher, and deeply read in the science of medicine; but he will be pronounced by all, "an excellent practitioner."

Such a one, too, in his relations, professional and social, will demean himself ever, with a wise reference to the rights of *others*, yielding his personal feelings and wishes, as far as possible, consistently with self-respect.

Akin to good judgment and prudence, is *docility* of manner, which leads to a deferential regard to the opinions of others, and especially of those our seniors in age and experience.

Docility of manner, is especially commendable in the *young*. But we are "never too old to learn." Reading and observation alike, teach that the wisest of men have generally been impressed with the truth of the aphorism. It is evidence of pride and arrogant assumption of superior intelligence, which, to say the least, do not betoken greatness of soul, to see a man unwilling to heed or hear the opinions of others; and especially is this the case, when superior learning and skill—which seniority of age and experience imply—

is thus treated. Not that it is necessary to yield your independence of thought, so far as to be governed by advice, or obey dictation, coming from whatever source; for you are to remember always, that you are responsible to your own intelligence, and if you disregard it, through a conscious incapacity, or a servile submission to the authority of a name, you are unfit and unworthy to practice a profession, which requires constantly, the fullest and best exercise of a sound and well disciplined mind; but because knowledge is not intuitive, and even to genius, much and careful study is necessary for its attainment.

Again, *courage* is an essential qualification to the physician—that courage which neither knows fear, nor regards personal danger, however great the peril to which exposed, in the faithful discharge of legitimate professional duty. The life of the physician, is a life of danger; for he must needs be often exposed directly to contagious and infectious maladies not only, but by the necessary irregularity of his living, he is rendered more susceptible than other men to epidemic influences when prevailing. Of this he is not ignorant; for he has made choice of the profession with his eyes open to the fact. To flee the post of duty, then, when danger is near, no greater shame could befall him. But this shame seldom happens to physicians—on the contrary, as a class, they evince, in time of trial, a steady courage which is rarely surpassed, if indeed equaled, by men in other spheres of duty.

It is a noble spectacle to witness, in the time of God's heaviest judgments upon men—as during the infliction of the plague, that has so at different times devastated wide regions of country throughout the east; or in the raging of that most loathsome contagion, which, before the time of Jenner, swept from the earth so many multitudes of people; or in the still oft repeated visitations of the yellow fever of the south, that annually returns to carry sorrow and desolation in the track of its pestilential atmosphere; or in that equally if not more dreaded disease, with which you are now familiar, which only a few years since, started forth from the remote Indies, where it had long prevailed endemically, to enter upon its wider mission of blasting and death, traveling from country to country, and from continent to continent, till it has circumscribed the world; a scourge which by the fearful rapidity of its course, and the great number and diversity in character and constitution of its victims, has every-

where carried fear and dismay in its progress—it is, we repeat, a noble spectacle to see the steadfast courage that always animates the whole fraternity of physicians, during such seasons of trial; sustaining them under labors of body and mind, that, in ordinary times, human strength could scarce endure; inspiring them with daring zeal, through which, they not only apply themselves to cure those who are committed to their skill, but also encounter extraordinary hazard in investigating the cause, nature and pathology of the direful malady they have to treat.

This is no ordinary display of courage. It is the fortitude of a soul intent on noble deeds, and sustained by a consciousness of the imperative duty which urges it forward. This is the courage which must animate every true hearted physician. Fortify yourselves then, gentlemen, by cherishing such a sense of personal responsibility in the discharge of your high duties, as shall tend to foster in your bosoms this manly virtue.

We remark again, a wise physician should be thoroughly *disciplined* in *self-government*. He should be able to hold his temper under the control of a strong will, which, at the same time, he keeps in subjection to his higher intelligence.

The physician who adds to sound judgment and prudence, the mastery of himself, will not only remain unruffled by the petty annoyances which he encounters, but be able, also, to preserve, ever, a calm, quiet serenity of manner under unlooked-for emergencies, and the weighty anxieties incident to professional practice.

The petty annoyances which you must meet, and which you will find of so frequent occurrence as to test sorely your patience, arise chiefly from the credulity and cupidity of men. Mankind are ever seeking after something new; and in their search for truth, but few, comparatively, reach the deductions of sound reason. With many, fancy leads the judgment. To such, a plausible theory, supported by *some* established facts, easily becomes an established truth. Such persons are not usually fond of deep thinking, and to apply the test of rigid analysis to their theories, by examining closely the grounds and facts upon which they rest, is a work they are not at all fitted for, either by natural endowment, or the skill acquired by education. And as it is an easy matter to find sufficient facts to give plausibility to a theory, no wonder that there is much of this kind of superficial knowledge in the world; the *more*, especially as the uneducated.

multitude are incompetent to decide upon its merits, and are easily taken by a plausible appearance. In no department of science, is there more of this, than in medicine. But such superficiality cannot abide the practical test, and therefore it is that new systems of medicine are subject to continual change. As one passes away, another arises to fill its place; and so has it always been. It appears strange that such should be the case—that men grow not wiser, with experience. The reason however lies in the extensively prevailing ignorance of medicine as a science, and of the principles upon which the healing art is practiced. Credulity, no doubt, is the offspring of ignorance. Eminently is this the case in medicine; for few, very few even of those eminently learned in other departments of science have sufficient knowledge of the principles of medicine to judge correctly between the true and the false.

No wonder then that empiricism abounds, since, as is often the case, it receives encouragement, not only by the patronage, but also by the earnest advocacy of men of learning and of wealth. To see this, and to feel that your honored profession is not only lightly esteemed by men, but that they ignorantly deny themselves the benefits which it offers, must occasion you some annoyance, if not indeed sorrowful feelings. Yet have no fear for the permanence and integrity of your profession, for it is based upon principles, deduced from science and from close and careful observation, which must stand forever. Medical science too is advancing, and although her progress is slow and steady, still it is progress which promises much for the future, by opening still wider the book of nature, and revealing truths, and establishing principles, before unknown. And there is good hope that this increase of medical knowledge may not be confined altogether to our profession, but that in this age of general diffusion of knowledge, at least so much may be diffused among the masses as shall yet win to the truth the confidence of men.

Be patient, then, gentlemen, with the ignorance you meet with. Commiserate, rather than severely censure those who, from this cause, revile and repudiate our profession. Above all things, be not tempted, by anything said or done through ignorance, into a forgetfulness of the gentlemanly bearing, and dignity of character, which you ought ever to preserve as physicians; for remember that you have the honor of the profession in your keeping, and, while it is true, that a gentle, courteous and dignified deportment, will go far towards

elevating and promoting it, it is equally true, that the absence of these, or even the *occasional* breach of the rules of good breeding and gentlemanly conduct will tend to lower and destroy it, in the estimation of men.

At times, however, you will find that a proper regard, if not for your profession, at least for the interest which humanity has in it, requires you to be outspoken and unsparing in rebuke of the conduct which aims at discrediting it. As when you meet with one whose cupidity or selfishness—in whatever form it may manifest itself—has led him to act traitorous to the profession which has honored him with its fellowship, and to deny and affect to despise, all its settled principles, and, with a bold front, at once to denounce its entire system of practice, appealing, for his support, to the passions and prejudices of men always easily excited against it; or else, with great professions of respect for the profession, his only desire is to lop off the uncouth branches and shoots of foreign growth which have entwined themselves about its body, marring the symmetry of its proportions. With this pretence and plea, he brings forward some of the many absurdities, long since obsolete in medicine, in ridicule of the times which gave them birth, and, by his insinuations, leaves the impression upon minds uninformed, that such, and only such are the inheritance which the much boasted Fathers have left to us—then sneers at those who now honor the names of Hippocrates, Galen, Celsus, and like notable worthies of an antiquated age.

We are not of the number who bow deferentially to a name, or pay servile homage to any age, because the caprice of men or the custom of the world have enjoined it; yet do we feel that, to those by whom great achievements have been made, from which mankind have reaped lasting benefits, it is most fitting, as well as an act of simple justice, to accredit the honor, and to cherish their names in proportion to the good they have accomplished for man, in affectionate and grateful memory.

That the ancients were men of superior knowledge or talent to any the world has since produced, is not said. That they were possessed of vast acquirements, and were skilled in some branches of medical science equal at least to any of modern times, it is believed to be not extravagant to affirm. That their writings, therefore, may contain valuable suggestions now new—indeed many things which, in our day, have been claimed as great discoveries of modern genius,

may be found in them—that the authors, although no doubt sometimes given to speculative reasonings, were yet careful observers of nature, and faithful reporters of facts discovered; that upon such facts, as a foundation strong and enduring, Medicine was based by Hippocrates; and that it has been confirmed and established by such facts, accumulated during succeeding ages, while mere theories one after another passed away, is affirmed with a confidence which unfalteringly appeals to faithful history and the unbiased judgment of men in its support.

Such has been the origin, development and progress of rational medicine. But say some, why hold the genius of modern progress to the absurd theories, and contradictory views, which were held by the ancients, and denounce, as heterodox, those who do not receive with implicit trust antiquated dogmas, which are supported only by speculative reasonings? We reply that, it is not true that such things are done by the defenders of the ancient faith.

We have an abiding confidence in this our impregnable fortress, whose solid foundations were laid by the Fathers in the remote ages of antiquity, and whose walls and bastions have been extended and cemented together, still growing and strengthening through succeeding ages; yet we feel bound to stand up against the assaults made upon it, by such as these, who, with friendly protestations but most treacherous purpose, addressing themselves earnestly against antiquated dogmas and obsolete theories, think, by sophistical logic, ornate with classical illustrations and rhetorical embellishments, to carry the judgment of men upon matters undisputed, and, by covert manœuvre, to destroy their confidence in all that is venerable, however good in medicine, thus sapping the very foundations of our strength. We fear not the assaults of open foes, but we would warily watch, and with stern, indignant rebuke would meet, the insinuating address, the sophistry and disingenuousness of professed friends, who seek to stigmatize our time honored and ever advancing profession, with an abandonment of the march of progress, and choosing, through a servile adherence to the ancients, rather to abide in darkness, than in the exercise of an enlightened understanding, to cast aside fables for facts. The stamp of the charlatan is indelibly impressed upon such, and however much they may hope to draw upon the sympathy of the world, by imputing mean and selfish motives to those who lovingly and therefore earnestly stand up for

the ancient faith, they only thereby make their portraiture more distinct and visible. But the picture only receives its finishing touches, when by their independence in seeking the real good of the profession, they are made martyrs of, forsooth! Fortitude, calm resignation and patience under injuries and wrongs, coupled with firmness and the forgetfulness and even sacrifice of self, are the virtues of the martyr. But behold their martyr spirit! Listen to their noisy clamor, under declared injuries! See the pompous egotism of the defenders of a new faith which their whole carriage speaks, and tell me if martyrdom is not the culminating point of their ambition, the climax of a purpose which ends only in self, and aims not wholly and solely to the advancement of a righteous cause?

But the anxieties of medical practice are neither few nor small, and often the burden of them is so great, as to weigh heavily upon the mind of the physician—so heavily indeed that, unless he is able to bring his feelings under the control of a strong will, he will often prove unmanned and unfitted for the duties of his trying position. Not unfrequently he is called upon to act in emergencies, where the nicest judgment is needed, upon the right exercise of which the life of his patient may depend. Whatever the character of the case may be, whether calling for medical or surgical skill, or both, if urgent, he sees that a thorough understanding of the case in its anatomical, medical and surgical relations, combined with practical skill, is needed for the prompt and efficient action which alone can save his patient; and the full realization of his responsibilities in such circumstances, cannot fail to make the strong man quail, unless by thorough discipline he is enabled to give ascendancy to his judgment and reason.

At best, too, the heart of the physician will often be oppressed by sad and sorrowful scenes. His best skill is only human aid, and the stroke of death, which sooner or later must reach *all* men, will now and then fall upon the objects of his professional care and friendly solicitude, and as often as it comes, oh! how does the stroke in its rebound inflict a wound severe and sometimes lasting upon the heart and sensibilities of the kind, sympathising physician, whose sense of responsibility and conscientiousness give him no rest, till by a careful review of all his treatment, he sees that he has done all that might have been done to save a useful life.

Forget not, then, young gentlemen, to discipline yourselves for

sore trials; and may God support and comfort you, who shall have added to ordinary trials, such as all men have in common in the occasional loss of kindred dear, the deep repeated wounds which enter the soul of the physician as often as he has to encounter death among those committed to his skill.

As the cares and duties of practice, are most exacting upon the health and strength, we notice next, as of no mean importance, the duty of the physician to look carefully to the preservation of these, and that from no selfish motive. The "good physician," the model after which you pattern, cannot easily be spared to the world—he owes it therefore to society and his profession to be careful of himself while he cares for others. Irregular hours are of necessity his portion; still he should see to it that he be not overtaxed, and that he has a sufficient allotment of sleep, and good and suitable food at proper intervals, if it be possible so to regulate his habits consistently with the claims of humanity. We are aware that the common sentiment of the world on this point is, that the physician should be prompt to answer every call, at all times, and under all circumstances, unless otherwise *professionally* engaged.

But we dissent from this, and must earnestly enter our protest against a demand so unreasonable and exacting, to use no harsher epithet. What, shall he whose whole life is devoted to the interests of humanity—whose daily study, is how he may best relieve the sufferings of his fellow men—whose constant thought is upon the nature and cure of disease—whose sympathy flows unceasingly for the sick and distressed—whose very life may be said literally to be passed by the bedside of sickness and death—who has no hour that he may call his own; for he is constantly to hold himself in readiness to answer the summons to the sick bed, whether from the midst of social convenings, or the delights of family communings, or from the very altar where he unites with others in sanctuary worship: shall *he* be treated with even less consideration than men commonly bestow upon their very brutes!

It is a common practice to send for the doctor, even at the most unsuitable hours, to come without delay, to a patient, whose disease both patient and friends have felt no uneasiness in testing their own or a neighbor's skill in the treatment of, it may be for days. Indeed many, if not the majority of calls, require answering in haste. "Come immediately," "Come as quick as possible," is the word;

and yet the cases which really require such prompt attendance, are very few. People do not reflect how in this respect they deal cruelly with their physician; nor yet, how the evil, which naturally and almost necessarily grows out of such a practice, may some day react painfully upon themselves. The evil referred to is readily seen. Repeated calls in haste, to cases of no urgency, induce carelessness, so that after a while physicians come not to heed such calls above others, and as a consequence, really very sick patients sometimes go unrelieved for hours. It is incumbent upon physicians to guard against this tendency; but at the same time we insist, that giving prompt attention to really urgent calls, will sufficiently derange regular habits, and systems however well planned, to demand vigilance, lest by a too protracted continuance of such irregularity their health becomes seriously and permanently impaired. It has been computed from reliable statistics, that physicians as a class, are shorter lived than other men, by ten years. Is not this, in addition to the other sacrifices which they are called to make, enough for society to demand of them?

The last trait of character which we shall notice, is *conscientiousness*. We use the term in its enlarged sense, which implies not only a regard for all the duties of our social relations, but the love and fear of God as well. Such a principle, as it looks to the motives and feelings which govern action—and is therefore the regulator of conduct—must commend itself to all, as of incalculable worth in the formation of character. Indeed it lies at the root of virtue, and is the sum and essence of all that is good and excellent in human character. We mention it last, and with less emphasis, because we would not so far impeach your early training as moral and religious beings, as to suppose it necessary to more than advert to it. He who possesses this principle, both desires to know, and to do right, always. Ethical rules have never to be *enforced* on him; for the reason and right of such rules he readily perceives, and yields to them his cordial approbation and obedience. In him, the virtues of the truly good man, spring into being, as it were, spontaneously.

And this attribute, which so ennobles human character, whatever its rank or station, adds especial lustre to the character of the physician; for it joins superior moral excellence to a profession most noble in its objects and its aims, and their beautiful adaptation gives peculiar grace to the man.

Such a one is constant in his devotion to duty. In her calls he shrinks from no peril or hardship. He is ever observant of all the obligations of his social position—is faithful to his pledges—honorable in every act; and in his professional associations especially, is scrupulously careful to avoid whatever might be construed into a selfish disregard for the reputation and interests of a brother.

In conclusion, then, gentlemen, we would urge you to cultivate a love of study. By constant application to reading, observation and reflection, you may achieve, even in a short life, much towards the advancement of your profession, in adding to its accumulated stores of wisdom and knowledge, and in your own increasing fitness for practical duties.

Be faithful to the benevolent spirit of your profession.

Let discretion and docility characterize all your intercourse with men. Be modest of your own merit, while you are ever ready to appreciate and pay suitable regard to that of others. Cherish always a high respect towards those of mature age, whose character for learning and worth is such as to merit it. Be ever reverent to the aged.

For your teachers, and this your Alma Mater, we need not to urge upon you, affectionate remembrance; for it cannot but be, that the zealous and faithful efforts of the one, in instilling into your minds sound scientific and practical principles; and the beneficence of the other, in fostering your struggling desires for knowledge, have touched a chord in your hearts, whose ceaseless vibrations will never suffer memory's quick perceptions to slumber.

Join to other noble qualities, high courage and self-control. Let these characterize your conduct through life, and mankind will accord to you a character for heroism, such as none but the best and greatest of men have attained.

And if, to crown all, true piety be added, its benign influence, like the ample folds of a garment, shall encircle you, warming, comforting and cheering you through life and in life's close—while integrity, honor and abundant usefulness, its rich fruits, shall diffuse the sweet savor of your memory all around. Who would not wish thus to live, and as his earthly existence draws to its close, be able with composure of soul to note its fading hours, as one by one they pass before him!

Such a life may we all fulfill, if, having laid the foundation of

character in correct principles, our aim be to live to a useful purpose. Aspiring to such a life, might we exclaim,

“ We men, who in our morn of youth defied
The elements, must vanish ; be it so !
Enough, if something from our hands have power
To live, and act, and serve the future hour ;
And if, as to the silent tomb we go,
Through love, through hope, and faith’s transcendent dower,
We feel that we are greater than we know.”

ART. II.—*Eighth Annual Meeting of the American Medical Association.*

Concluded from page 573 of 2d volume.

Dr. Atlee, of Pa., offered the following resolutions :

Resolved, That to secure efficient teaching in Medical Schools, where a prime object is to enforce practical precepts, a large degree of union and harmony must exist among the teachers, and confidence be reposed in them by their pupils.

Resolved, That any such unnatural union as the mingling of an exclusive system, such as Homœopathy, with scientific medicine in a school, setting aside all questions of its untruthfulness, cannot fail by the destruction of union and confidence, and the production of confusion and disorder, unsettling and distracting the minds of the learners, to so far impair the usefulness of teaching as to render any school adopting such a policy unworthy the support of the profession.

The resolutions were seconded, accompanied with the remark that they had reference to an attempt made in Michigan to thrust Homœopathy into the Medical Department of the University of that State. Dr. Palmer, the delegate from the Medical Department of the University, was called upon for a statement upon the subject.

He remarked that such an attempt as had been referred to had been made, and that a report had gone forth that such a chair had actually been established. An act had passed the Legislature du-

ring the last hours of its recent session, providing that a chair of Homœopathy should be established in the Medical Department of the University, but as was contended, the constitution of the State placed the government of the University—the power to appoint professors and appropriate the money of the Institution—in the hands of a Board of Regents elected by the people, and that these Regents had not, and he fully believed would not, make any such appointment.

He had no doubt that the sentiments contained in the resolutions offered by the gentleman from Pennsylvania were those of this learned and dignified body—a body which had been spoken of as “the assembled wisdom of the Profession” — and that all men of sense and principle in the profession who had reflected upon the subject, or who knew anything of medical schools, entertained such views.

He well knew that a school adopting such a course as was indicated and denounced in the resolutions, would fall under the deep condemnation of all regular physicians, and that without their confidence and support, unless they would send students to it from their offices, it could be supplied only by such materials as the irregulars are usually made of, and must fail and become extinct as a respectable and orthodox institution. It could not and would not receive your support. This being the unquestionable fact—the sentiments of the resolutions being such as the profession entertained and would act upon, he could but approve, whatever might be the result, of their expression at this time and by this body.

If there were any present that entertained other views—if there were any that would extend their patronage to a school where such incongruities were brought together—where the lecture of one hour was flatly contradicted by that of the next—where all union, and all harmony, and all confidence, were destroyed—where a policy was adopted which would be the same in effect as the introduction of a Mohammedan teacher into a Christian Sunday School or Bible Class—if any could approve or tolerate such a course, he hoped we should hear from them; but if, as he anticipated, we were all of one heart and one mind, let there be a united expression which should show to the Regents of the University of Michigan what would be the result to their cherished Institution—an Institution which had sought to comply with the recommendations of this body, and

which has received the favorable mention of more than one committee on Medical Education appointed and endorsed by you—we should show to all in unmistakable language what would be the result, should they, (as they will not,) attempt to join together and mingle into union, such total incompatibilities.

He was happy to say, that so far as he knew the views of the Regents, they were in accordance with common sense—though as the subject was comparatively new to some of them, they had appointed a committee of their number to investigate the whole matter, and he hoped after such investigation they would make a report which would do much to scatter light through the community, and tend to the establishment of reason and truth.

He hoped that if information was sought by the committee, of any members of this body, especially of those who had recently been abroad, they would respond with readiness, communicating all the facts within their knowledge upon the subject.

The founders of the Medical Department of the University of Michigan, sought in its organization to follow your directions—those connected with it now, seek to render it worthy of your approval; and in the worst event, should they fail to accomplish this object, they intend at least to save their own professional honor untarnished amid the ruin.

During the remarks of which this is a very imperfect sketch, a more extended account of the University, its organization and character, the act of the Legislature and the position of the Regents and Faculty, were given.

The resolutions of Dr. Atlee, and the remarks upon them; were received with strong expressions of approval, and the resolutions were unanimously adopted.

Dr. Alfred Stille, of Philadelphia, read a series of resolutions respecting the importance of more extended courses of instruction in our Medical Schools, and of presenting the subjects in their natural order, beginning with the elementary branches first, which resolutions were referred to a special committee to report at the next meeting at Detroit.

Dr. Carson, of New York, presented a volunteer communication “On the influence of Lead on the Heart.” It was read, and the

precedent established of referring volunteer papers presented at the meeting to a special committee, to judge of their worthiness to appear in the Transactions.

The State Society of Ohio was severely reprimanded for passing a resolution in opposition to an article in the Code of Medical Ethics, and was warned that unless the act be rescinded, that Society cannot hereafter be represented in this Association.

During its session, the Association appointed the following committees :

On Prize Essays—Drs. A. B. Palmer, Samuel Denton, A. R. Terry, Abram Sager, S. H. Douglass, C. L. Ford, E. Andrews.

Committee of Arrangements—Zina Pitcher, of Detroit, chairman ; Moses Gunn, G. B. Russell, A. L. Leland, Morse Stewart, P. Klein, J. A. Brown, all of Michigan.

On Organization of State and County Societies—Dr. A. B. Palmer, Chicago ; N. B. Ives, Conn. ; E. B. Haskins, Tenn. ; C. Woodward, Ohio ; J. Crosby, N. H.

On Medical Education—W. H. Anderson, Ala. ; J. B. Flint, Ky. ; P. H. Cabell, Ala. ; G. Hayward, Mass. ; E. B. Smith, Mo.

On Medical Literature—P. C. Gaillard, S. C. ; N. P. Monroe, Maine ; J. Cooper, Del. ; R. Hilles, Ohio ; A. Coffin, S. C.

On Registration of Marriages, Births and Deaths—Dr. M. W. Wilson, Hartford, Conn., chairman ; Drs. G. S. Palmer, Gardiner, Me. ; Silas Cumming, Fitz William, N. H. ; G. T. Elliott, Woodstock, Vermont ; Ed. Jarvis, Dorchester, Mass. ; Jos. Mauran, Providence, R. I. ; John H. Griscom, N. Y. City ; H. Carpenter, Lancaster, Pa. ; O. H. Taylor, Camden, N. J. ; Lewis P. Bush, Wilmington, Delaware ; A. Snowden Pigott, Baltimore, Md. ; David H. Tucker, Richmond, Va. ; — Pitman, Tarboro, N. C. ; Harry Lindsly, Washington, D. C. ; John L. Dawson, Charleston, S. C. ; R. D. Arnold, Savannah, Georgia ; A. Lopez, Mobile, Ala. ; James Jones, N. Orleans, La. ; B. C. Foster, Nashville, Tennessee ; C. J. Blackburn, Covington, Ky. ; John Dawson, Columbus, O. ; Edward Murphy, New Harmony, Ind. ; N. B. Stebbins, Detroit, Mich. ; J. V. Z. Blaney, Chicago, Ill. ; Geo. D. Wilber, Mineral Point, Wis. ; Wm. McPheeters, St. Louis, Mo. ; J. D. Elbert, Keosauqua, Iowa ; John H. Murphy, Falls of St. Anthony, Minnesota. Mississippi and Arkansas, blank.

Special Committees to report upon named subjects.

Lewis H. Steiner, of Washington, D. C., on Strychnia—its chemical and Toxicological properties.

Ashbury Evans, of Covington, Ky., on tracheotomy in epilepsy.

J. Taylor Bradford, of Augusta, Ky., on the treatment of cholera.

Charles Z. Chandler, of Rocheport, Mo., on malignant periodic fevers.

H. A. Johnson, of Chicago, Ill., on the excretions as an index to the organic changes in the system.

Henry J. Bigelow, of Boston, Mass., on microscopical investigation of malignant tumors.

E. H. Davis, of New York, on the statistics of calculus diseases, and the operations therefor.

J. S. Carpenter, on the treatment and curability of reducible hernia.

N. J. Fulder, of Maine, on the best treatment of cholera infantum.

William B. Page, of Philadelphia, on injuries of the joints.

Wilson Jewell, of Philadelphia, on the statistics of mortality in the United States.

J. Knight, of New Haven, Conn., on endemic fevers.

P. H. Cabell, of Ala., on the native substitutes for cincona, indigenous to the Southern States.

James M. Newman, of Buffalo, N. Y., on the sanitary police of cities.

L. M. Noble, of Le Roy, Ill., on puerperal fever and its communicability.

J. M. Freer, of Chicago, Ill., on the progress of general and descriptive anatomy.

J. M. Corson, of New York, on the causes of the impulse of the heart, and the agencies which influence it in health and disease.

D. Meredith Reese, of New York, on the causes of infant mortality in large cities, the source of its increase, and the means for its diminution.

Mark Stevenson, of Vermont, on the treatment best adapted to each variety of cataract, with the mode of operation, place of election, time, age, &c.

J. B. Coleman, of New Jersey, on the effect of mercury on the living tissues.

F. G. Richardson, of Louisville, Ky., on the diversity of the venereal poison.

J. B. Flint, of Louisville, Ky., on the best mode of rendering the medical patronage of the national government tributary to the honor and improvement of the profession.

D. M. M. Latta, of Goshen, Ind., on whether there are any means by which the growth of the foetus in utero, may be controlled without injury to the mother or child.

Thos. Miller, of Washington, on toxicology.

E. K. Peaslee, of Hanover, N.H., on Inflammation, its pathology, and its relation to the reparative process.

D. D. Thompson, of Louisville, Ky., on the remedial effects of chloroform.

Wm. Clendennin, of Cincinnati, Ohio, on epidemic erysipelas.

C. G. Comegys, of Cincinnati, Ohio, on the state of the urine in tubercular diseases.

During their stay in Philadelphia, the members of the Association were most hospitably entertained by their colleagues of that city. Evening parties were given to them by Drs. Wood, Stillé, Paul, Norris, Jackson, Pancoast, Hartshorn, Bache, Hodge, and Mr. Lea. All the public and many private institutions, were thrown open for their inspection, and every available moment was agreeably occupied. All seemed delighted with their visit, and the utmost harmony and good feeling everywhere prevailed.

The annual festival on the last evening of the session, according to resolution of last year, was dispensed with—a circumstance which we presume no one regretted. On the whole, a more pleasant meeting of the Association has never been held. Though some warm opposition was at first offered to the Association's coming to Detroit, all finally acquiesced cordially in the measure, and we are anticipating a large and cordial re-union in the City of the Straits. Let the profession of Michigan organize without delay, and be ready to receive them.

ART. III.—*Luxations of Hip and Shoulder Joints.* By MOSES GUNN, M. D., *Prof. of Surgery in the University of Michigan.*

The object of the present paper is to elucidate more fully certain views relative to luxations of the hip and shoulder joints, which were contained in a short article originally read before the Detroit Medical Society, and subsequently published in the *Peninsular Journal of Medicine*. An article on dislocations of the hip, by Dr. Markoe, of New York, Published in the January number of the *New York Journal of Medicine*, induced me to re-peruse the article by Dr. Reid, of Rochester, published in the *Transactions of the State Medical Society of New York*, and I was pleased to see how illustrative of the views contained in my former article, were two experiments, one made by each of these gentlemen. This, together with further experiment on my own part, led to the preparation of the present paper; in the construction of which, I shall here introduce my former article, published in September, 1853:

“The views here advanced I have taught for the past two years to the gentlemen composing the Medical Class in the University; and I shall offer no apology for calling the attention of the Society for a few moments this evening to the subject of Dislocations of the Hip and Shoulder, and more particularly to that form of the accident, which, from the anatomical peculiarities of the joint, is one exceedingly difficult to reduce; and for the reduction of which Dr. Reid has recently proposed a novel and efficient mode.

“It is not my intention to discuss the question of priority which has been raised in reference to this subject, for there can be no doubt that Dr. Reid arrived at his conclusions by a course of reasoning and experiment; and that those conclusions were most essentially novel to a large majority of the profession. I propose rather, briefly to consider the prominent peculiarities of the joint, and the relation of the parts in a state of dislocation; the structures which oppose the return of the head of the femur to the acetabulum; the manner in which Dr. Reid’s manipulations overcome this opposition; and lastly, the application of the principle involved, to the reduction of some other dislocations.

“The encircling ridge which gives depth to the cotyloid cavity, presents upon its outer slope a plane, the inclination of which varies in different parts. At its posterior portion this inclination is very

great, and it would seem in dislocation in this direction, impossible to return the head of the bone to the cavity without lifting it completely over the ridge; upwards and backwards it is more gradual, and would seem to afford a much more easily surmountable obstacle; yet when we examine the relation of the parts in a dislocation in this direction, we find that applied to this surface, we have the anterior and inferior surface of the head and neck of the femur, the rotundity of the head corresponding with the curvature of the slope, while the edge of the acetabulum corresponds with the curvature described by the anterior and inferior surface of the neck. Although thus seemingly locked together, comparatively slight extension in the line of dislocation would cause the head to ride over the edge of the cavity, were it not bound down in this position by the surrounding tissues. Which particular tissue constitutes these bonds is an important question to him who seeks to relax them. Dr. Reid, in common with the profession generally, considers the muscles the agents which thus oppose our efforts at reduction, and his manipulations are conducted with a view to relax them, while the femur, acting as a lever, raises the head of the bone clear of the edge of the cavity. With this same view we have the directions of the books and public teachers to apply extension and counter-extension *slowly* and *uniformly*, in order to *tire out* the rebellious muscles. Blood-letting, antimony, and the hot bath are also called in to aid in this laudable crusade against these wicked organs.

“In this view, I would respectfully differ with Dr. Reid, the teachers, books and profession, and state my honest belief that the muscles oppose our efforts very little more than they do the progress of our earth in its orbit. This belief I have repeatedly verified by experiments upon the dead subject, and the members of the medical class of 1851–2 in the University will remember those conducted before them. A subject was placed upon the table, the lower border of the gluteus maximus was raised, and a scalpel carried through the subjacent muscles, and an opening made in the posterior and superior portion of the capsular ligament. The round ligament was then divided, and the head of the femur luxated upon the dorsum of the ilium. The usual indications of this dislocation were present. The subject was placed in the proper position, a counter-extending band applied to the perinæum, and fixed; the strength of two men exerted now upon the extending band, while endeavor was made

to raise the head of the bone clear of the acetabulum with a jack towel, was insufficient to reduce the luxation. Reid's method of manipulation readily replaced the bone. This experiment was repeated many times, and uniformly with the same result. As *muscular action* could not have opposed our efforts and prevented success in this case, the question naturally presents itself, what structure stood between effort and success?* I answer, *the untorn portion of the capsular ligament*. In support of this view, let us consider for a moment the position of the limb at the instant of escape of the head from the socket during the process of dislocation. To do this we must bear in mind that force applied to the knee or foot while the limb is in a state of adduction, constitutes the most frequent cause of this dislocation. Force thus applied adducts the limb still more powerfully before dislocation takes place, and at the moment of the escape of the head of the bone from the socket, the limb is in a direction which crosses the thigh of the opposite side. Immediately that the head of the bone has cleared the edge of the acetabulum it settles into its position upon the dorsum of the ilium, and the limb assumes the position and direction indicative of the accident. During the dislodgement of the bone, the superior and posterior portion of the capsular ligament is ruptured, through which the head protrudes; while from the position of the limb at the instant of protrusion, the anterior and inferior portion is very much relaxed, thus allowing the head to rise easily over the acetabulum. As soon as the head settles into its position upon the dorsum of the ilium, the direction of the limb is changed, and the untorn portion of the ligament becomes more tense, and for this reason the head of the bone cannot be readily returned to its place, till the limb is again placed in a position to relax it. Dr. Reid's method does this most effectually, and I conceive that any other plan which does not accomplish this, as for instance extension and counter-extension by the pulley, or Jarvis' apparatus, in the usual direction, succeeds only by lacerating much more extensively, if not by actually tearing the ligament completely asunder, before the head of the bone will ride over the edge of the cavity.

“The principle, then, I would seek to establish, is this—*that in luxations of the hip and shoulder the untorn portion of the capsular ligament, by binding down the head of the dislocated bone, prevents*

* Doct. Reid would answer, *passive* muscular fibres.

its ready return over the edge of the cavity to its place in the socket ; and that this return can be easily effected by putting the limb in such a position as will effectually approximate the two points of attachment of that portion of the ligament which remains untorn.

“This principle can be successfully applied to the reduction of the backward luxation of the femur into the ischitic notch, and also to the several luxations of the shoulder. It has several times been my guide in the reduction of the downward dislocation of the humerus into the axilla. The patient is seated upon the floor, an assistant slowly raises the arm to an angle of forty-five degrees to the plane upon which the patient is sitting ; and now while the assistant makes extension in this direction, the surgeon makes pressure with the hand upon the top of the shoulder, the bone readily returns to its place, and the arm is dropped to the side and secured in a sling.

“White’s method of reducing this luxation, which is figured in Druitt, is essentially the same, the only difference being in the position of the patient. According to his plan the patient lies upon his back, the scapula is fixed by a counter-extending band applied to the top of the shoulder, or by the hand of an assistant, while ‘the arm is raised from the side, and drawn straight up by the head, till the bone is thus elevated into the socket.’ In either method it will be seen that the upper and untorn portion of the capsular ligament, by the elevation of the arm, is very much relaxed, thus giving a latitude of motion to the head which greatly facilitates its return, and which could not be obtained by any manipulation in which this relaxation was less perfect. Nine-tenths of the force spent in extension and counter extension may be spared, in the reduction of all those dislocations in which, by alteration of the position of the limb, such relaxation is effected ; and in the several luxations above specified, this end is undoubtedly attainable.”

Further thought and experiment upon this subject have convinced me that dislocations of the hip joint *cannot occur*, except in certain positions, and these, are positions of *very great distortion*. In support of this view I would call attention to the great security against this accident provided by nature in the anatomy of the joint. The great depth of the acetabulum, surrounding on all sides the head of the femur, renders its escape nearly, if not absolutely, a physical impossibility, so long as the legs are parallel to each other, and on a line with the body. Fracture of some of the bony structures of

the joint, would be the result of great violence, in this position of the limbs, but dislocation without fracture, I apprehend, never. Before dislocation can take place, the limb must be so distorted that the walls of the acetabulum will afford no longer protection against the escape of the head of the femur, the dislocating force throwing the head, in this changed direction, against some portion of the capsule of the joint, which gives way before it, permitting the rupture of the round ligament, and the escape of the bone. It is evident that while the changed direction of the limb, throws the head wholly against some portion of the capsule, the opposite side of this capsule must be relaxed, and by its relaxation facilitate the riding of the head over the edge of the cotyloid cavity. Taking, for example, the upward and backward form of luxation, in my experiments, I have found it impossible, by my own strength, to produce luxation, even when the direction of the limb was changed to that which distinguishes this form of the accident *after* it has occurred, although the upper and posterior portion of the capsule, and the round ligament, were divided. In the course of my instruction during the last winter, I introduced the following experiment: A fresh, whole, and muscular subject was selected, and a circular incision was made around the middle of the thigh down to the bone; another, from the tuberosity of the ischium around the inner aspect of the thigh, and over the dorsum of the ilium to the point of commencement, and all the tissues cleanly removed from the bone and capsule of the joint. The upper and posterior half of the capsule was then cut away, leaving the anterior and inferior half, whole, and the round ligament was divided. In this state it will be seen that *all* tissues were entirely out of the way, (and could neither afford protection against dislocation, or impediment to reduction,) except the anterior and inferior half of the capsular ligament. I now placed the limb in the position which characterizes the dislocation upon the dorsum, viz: the knee in advance of the other, and the foot inverted; and the pelvis being fixed, I attempted to produce dislocation, but failed to do so, and I believe that no force, however great, applied to the knee, would be sufficient to accomplish the escape of the head of the bone without fracture of the acetabular walls, so long as the limb remains in this direction; for in this position, the head presses *perpendicularly* against the superior and posterior portions of the acetabular walls. But on carrying the

limb to a position in which the thigh crossed that of the opposite side, at a point just above its middle, slight pressure was sufficient to dislocate the bone, for the acetabular walls, in this position, presented to the head of the bone an inclined plane, while from the same reason of position, the undivided portion of the capsule was relaxed, thus permitting the head to slide easily up this inclined plane and ride over the acetabular edge. At the moment, however, during which the head rested upon the edge of the cavity, this undivided portion of the capsule became tense, relaxed again as the head settled down upon the outside of the cavity, and upon dropping the limb down to the position which characterizes this dislocation, it became again tense. Efforts at reduction by extension and counter-extension in this direction were now made, but were unsuccessful, for this tense, undivided portion of the capsule bound down the head so that it could not ride back over the edge of the acetabulum; but on carrying the limb across the other, to the position in which it was at the moment of escape, the reduction was easily accomplished.

Upon the limb of the opposite side the experiment detailed in my former article was repeated, and with the same result.

The following case illustrates also the practical bearing of the principle under consideration: In February of the present year I was called into the interior of the State to reduce a dislocation of the hip of four days standing, which had resisted the efforts of two very efficient professional gentlemen. They had extended with Jarvis' adjuster, and practiced Reid's manipulations, but without success. Reid's method, they informed me, only altered the form of luxation, carrying the head downward and forward upon the obturator ligament. The luxation had been primarily upon the dorsum, but upon examination I found the head of the bone in the ischiatic notch. I placed the patient upon his back, and attempted reduction after Reid's plan, but with the same result that had attended the efforts of the gentlemen in attendance. By inverting the foot, I slipped the head back to its position in the notch, and repeated my efforts, but with like result. I thus four times essayed reduction, but succeeded only in making the head travel from one position to the other. I adopted this plan with confidence, from the fact that the luxation had originally been upon the dorsum, but failing to replace the bone, I applied Jarvis' adjuster, and made ex-

tension after the usual method, and carried it to the extent of bending the extending bar to the form of a very considerable curve, but was not able to reduce the luxation. Opposed, as I was before, to violence, I removed the instrument, and straightening the extending bar, resolved to adopt Blundell's obstetric motto, *arte non vi*. After some deliberation, I armed the adjuster with the shoulder fork, flexed the thigh at right angles with the body, and adducted it; and applying the shoulder fork to the pubis and ilium, and attaching the extending bar to the knee, a few turns of the instrument evolved the head into the socket.

Although Doct. Reid attributes to the muscles the difficulties of reduction, he is explicit upon the fact that it is not muscular *activity* which opposes our efforts, and points triumphantly to the ease with which muscular contraction is overcome in fractures of the neck and shaft of the femur. He conceives that the muscular tissues immediately surrounding the joint, are the means of binding down the head of the bone in its new position, thus preventing reduction. He says, "the true condition of the muscles is this: the six, rotator, adductor, and abductor muscles, viz: the obturator externus anteriorly; the pyriformis, obturator internus, gemelli and quadratus, posteriorly, are all in a state of extreme tension, while the other eleven muscles, larger and smaller, are shortened, and in one sense, contracted, but in another, and in fact, they relaxed—that is, in a recent dislocation. Now it is evident on the slightest inspection, that the six muscles, that are put upon the stretch, being in antagonism to each other, that is, the short, strong obturator externus, anteriorly, being opposed by the other five posteriorly, and all acting at nearly right angles to the axis of the femur, must hug, with great power, the head of the bone, upon the dorsum, and by the same force, oppose its ascent over the brim of the acetabulum, in any direct attempt to replace it by traction towards its socket. These six muscles, then, so violently stretched, constitute the real and only impediments to the reduction by the usual mode, and not the shortened and contracted triceps and glutei, as has always been believed and taught by all authors and professors of surgery."

So forcibly impressed is Dr. W. with the idea that "*these six muscles constitute the real and only impediment,*" that even in an experiment of his own, which he details in his paper, he fails to see the fact which he actually relates, that there is *another* structure

which forms an impediment. His experiment was upon a subject considerably advanced in decomposition, and in the course of its relation he holds the following language :

“After carefully noting the relative position of bone and muscles, we made traction on the femur downward and inward over the sound limb, as we are directed by most authors ; but the moment the attempt was made, the muscles already named as being in a state of tension became more tense, although all the muscles about the joint were separated from each other—were loose, without vitality, and almost in a state of decomposition, yet it was with great difficulty that we could bring down the head into its socket ; and when we did so, we carried away a part of the capsular ligament.”

It seems hardly probable that muscles “almost in a state of decomposition,” could form the “real and *only* impediment,” particularly, when in accomplishing reduction, he “*carried away a part of the capsular ligament.*” In this connection, I quote from my first article : “Extension and counter-extension by the pully, or Jarvis’ apparatus, in the usual direction, succeeds, only by lacerating much more extensively, if not actually tearing the ligament completely asunder, before the head of the bone will ride over the edge of the cavity.”

Dr. Markoe, who adopts Dr. Reid’s views relative to the nature of the impediment, seems to have had a similar illustration, in one of his experiments, and like Dr. R., fails to see that the untorn portion of the capsular ligament forms an “impediment.” His experiment is as follows :

“I removed all the muscles, leaving the capsular ligament only, and then endeavored to dislocate the head of the bone. I first tried adduction, and carried the limb so forcibly over the abdomen that the knee touched the anterior surface of the thorax, but without producing luxation. In making more violent efforts in the same direction, the cervix fractured, or rather cracked across within the capsule, and soon after the ligament itself tore across at its superior and posterior part, just opposite the point of yielding of the cervix. The laceration was directly across the ligament, and occupied about one half of its circumference. As soon as this took place, the dislocation was easily effected. The neck of the femur and the trochanteric portion of it were now seen to be kept in their place by the untorn portion of the capsular ligament, which acted as a sort of

fulcrum, upon which, by using the limb as the long arm, we could make the head, as the short arm, move about in any direction upon the surface of the dorsum of the ilium."

Does the untorn portion of the capsular ligament form an impediment? My own views are that it constitutes the *chief*, if not the *only* opposition to our efforts at reduction. If it is urged, that in this view, I am exclusive and ultra, I ask only that before such judgment is passed, the experiment of removing all the tissues about the joint, in the manner detailed above, may be made.

DETROIT, May 15, 1855.

ART. IV.—*Dislocation of the Femur.*

Theodore Nonager, aged seven years, while engaged in play with his fellows, in the act of running, fell; as he was falling, his playmate running with him, fell on to him, with the effect of dislocating his left hip, throwing the head of the bone upwards on the dorsum of the ilium.

I was called to see him four or five hours after the accident happened, and found him with the following symptoms: patient lying on his back, with the toes of the left foot pointing to and resting near the instep of the sound limb; the dislocated limb to appearance is from an inch to an inch and a half shorter than the other.

While he lies directly upon his back, and the posterior part of the sound leg, the dislocated one rests directly upon its inside; the head of the bone can very plainly be felt lying up on the dorsum beneath the glutei muscles. The patient does not complain of pain when the dislocated leg is carried gently a few inches over the sound leg, but the least effort at reduction is resisted by the most sensitive cries of pain.

The little fellow was placed upon a firm mattress on the floor, a sheet folded lengthwise was folded across his hips with an assistant upon either side to hold his pelvis firm, and putting him under the influence of ether, I went through the manipulations of Reid's process. In my first trial I failed, though I brought the head of the bone very nearly upon the lip of the acetabulum, but I did not sufficiently abduct the limb as I brought the leg down—consequently it slipped back to its former position.

Immediately repeating the manœuvre, but much more carefully flexing the leg on the thigh, and carrying the thigh over the sound one strongly flexed upon the abdomen by the umbilicus over to the diseased side, bringing it down from its flexed position, and as the thigh neared a right angle with the pelvis, strongly abducting it, at the same time rotating the head of the bone inward by a lever-like movement of the leg, accompanying this movement by a rocking motion of the whole leg, it slipped back to its socket with a very audible report, and an exclamation from the assistants and bystanders, of "there, there it is in!" and as the leg was brought down to a straight position by the side of its fellow, all deformity was gone. Applied a roller around his hips, tied his knees together, kept him quiet for a few days; he recovered perfectly, without any unfavorable symptoms.

Both attempts at manipulating did not occupy more than a minute of time. **

EDITORIAL.

The present number begins our third volume. It will be observed that we have transferred our printing to Ann Arbor, where with new type, and a closer personal supervision of the work than we were able to give it before, we expect to afford our readers a steadily increasing satisfaction. We are happy to state to our friends that we have found our list of subscribers to be constantly on the increase; but we wish to call attention to the fact that the late high prices and pecuniary panics have increased the expense of printing, and also made many of our readers alarmingly forgetful of the fact that *our terms are in advance*. A word to the wise is sufficient. As this is the beginning of a new volume we call upon our friends to consider our necessities, and be prompt.

We have established the Journal on a secure and permanent footing, but it has been at much expense of time, labor, and personal pecuniary loss. At these outlays we do not complain, because they are necessarily incidental to the origin of a new Journal,

but if we meet them cheerfully, then also all our friends who think us worthy of patronage ought to stand by us, and pay up when they receive the July number.

Gentlemen, let us all stand by each other. The National Association is to be in our midst next spring. If we of the Medical Profession of Michigan appear at that meeting without energy, without unity, and without enthusiasm—if our Medical Societies, our Journal, and our School, shall seem feeble and inefficient for want of your support, we shall be disgraced before the highest medical assembly in the Union, and it will be concluded that the insult which two or three lobbying quacks put upon us in the closing confusion of the last Legislature was good enough for us. We feel therefore that we are not beggars for personal favor when we ask the Physicians of Michigan to subscribe for the Journal, and to pay up promptly. We fight in the common cause—let us work together.

The daily and weekly papers having announced the fact that one of the Editors is about to resign his position in the University to accept an appointment in another Institution, it is proper to state that this change will interfere in no way with the welfare of the Journal. When the vacancy in the editorial corps occurs, it will be promptly filled in a worthy manner, and everything go on as before.

Under the head of "The Medical Department of the University of Michigan," the May No. of the *North Western Medical and Surgical Journal* has an editorial article, which we are constrained, though reluctantly, to notice. After speaking of the Homœopathic Act of our Legislature, its absurdity, &c., and expressing the hope that for the credit of the State and the Profession, the Board of Regents are the governors of the University, and have more sense than to allow the act to be carried out, our neighbor intimates that there can be no security to the institution while the Regents themselves are chosen by the same people who elected the Legislature. We see in the St. Louis and other Medical Journals, the same distrust expressed of the people in this matter; a distrust, however, which we do not feel. We believe the *people*, though they may,

through ignorance upon some subjects, or through inattention, commit errors, and grievous ones, yet are they sound in mind and heart, and though their Representatives in the Legislature may be corrupted or deceived—may in various ways be improperly influenced by designing men who may hang about them, applying a corrupt system of management, called in legislation “log-rolling,” and acts of great folly may be committed, yet the “sober second thought,” even of legislators, and certainly the enlightened understanding and mature judgment of the *people*, will, in all essential matters, be correct.

In the case in question, we have not the slightest idea that a tithe of the people of Michigan, when the subject is presented before them, will be found in favor of introducing antagonistic systems—irreconcilable differences, into a school of practical teaching. Though the mass of the people may be ignorant of medical science—though it may be to them a matter of mystery, a subject of prejudice or of unenlightened faith—yet the masses are essentially sensible. There are certain laws of the general mind which may be relied upon. Where party feeling and personal interests are not involved, common sense will prevail; and all will see that an attempt to harmonise incompatibilities—to introduce into a school which must have an individuality, a character, a unity, the most utter contradictions in theory, and the most opposite precepts in practice, must be futile or destructive.

It can but be generally regarded as a principle of the plainest common sense as well as a precept of unerring wisdom, that “a house which is divided against itself” in all essential particulars, “cannot stand,” and that this principle is fully applicable in this case. It must also be seen that another principle, having the same foundation in common sense, and supported by the same infallible authority, viz: that “no man can serve two masters; for either he will hate the one and love the other, or he will hold to the one and despise the other,” will be applicable to a class of medical students whose feelings are always active. and where a set of the most opposite principles are urged upon their acceptance; and that as a consequence of this, all order and all discipline will be destroyed. As we have faith in common sense and common justice, so have we faith that these views will prevail. Individuals may be corrupted—larger bodies may be swayed by party feeling, or deceived by

false appearances and representations; but with the masses there is integrity and sense, and in them have we confidence—a confidence we shall not yield till compelled by facts, and then will we hope that the delusion may be transient.

But it was not with a view to such extended comments on this part of the editorial of the North-Western Journal, that we commenced this notice. The Editor, though he expresses sympathy for the Faculty of the Medical Department of the University in this contest with folly, takes exceptions in the latter part of his article to our review of Dr. Cabell's Report on Medical Education to the National Association—and in these strictures of the Editor, we are pained to say that we find language, considering the source from which it comes, which utterly surprises us; and if it does not disturb our confidence in the people in their more collective capacity, when left free in the exercise of reason, it certainly does shake our confidence in individuals, when their interests are affected, or their jealousies are aroused.

Now that the reason of our surprise and loss of confidence may be apparent, our readers will bear with us, particularly as the subject to our school is important—so important, indeed, that we must sink all personal considerations in administering this justice; while we quote the Journal at length, and present in some detail the facts in the case. The Journal says:

“We notice in the Peninsular Journal, a somewhat lengthy review of Dr. Cabell's report, &c., the closing paragraph of which very complacently claims that the Medical Department of their University is admitted to be ‘far in advance of other Medical Schools in their system of education, requisitions, &c.’ The only foundation we could find for this arrogant flourish, was a quotation which Dr. Cabell had made from a previous report of Dr. Pitcher, of Detroit, to the effect that it was ‘in contemplation to adopt the same standard of qualifications, in regard to preliminary education, for the admission of students to the Medical, as to the Literary Department of the University.’ Now, if we recollect aright, this same thing was said to be in contemplation in one of the first circulars issued in reference to the organization of that school. It is still, we presume, in contemplation. Meanwhile the Faculty are annually admitting students without the slightest reference to preliminary qualifications of any kind. How long they will continue their con-

temptations, adroitly publishing it just before each annual meeting of the National Association, as a matter just about to assume great practical importance, we do not know. But we do know that such baseless pretensions indicate a very weak spot somewhere."

Our friend, the senior Editor of the North-Western Med. Journal, is doubtless the writer of the above quotation. He is, or was, "the young man from Binghamton," who figured so conspicuously in the establishment of the National Medical Association, and was so loud in insisting upon all the reforms in the schools which were the objects to be accomplished in the organization of that body. He at that time declaimed in the most glowing terms respecting the low standard of acquirements, preliminary and professional, established by the schools for those admitted into the profession. He insisted with great vehemence upon extending the lecture term to six months, and in short, upon all the "reforms" which were ever suggested. He has recently written a history of the Association, in which he still places himself in the front rank of the reformers, showing by *frequent mention* that he has been the most active with his voice in the Association, and with his pen in the N. W. Journal, and in a work entitled "A History of Medical Education," &c. in promoting all these objects. He is also, it should be mentioned, (though this circumstance may be a cause for lessening the surprise that he should traduce us,) a Professor in Rush Medical College, and the Medical Department of the University of Michigan is the nearest School to the one with which he is connected, and its most immediate rival. Still, the Editor wishes, we have no doubt, to maintain the reputation, and he usually sustains the character, of a consistent, an upright, and an honorable man.

Our remark which he pronounces an "arrogant flourish," and "baseless pretension," is this: after speaking of the reforms advocated by Dr. Cabell in his report, we say—"We are proud that the Medical Department of the University of Michigan is so far in advance of almost every other School in the country, in the cause of reform herein so ably pointed out." The Journal says we claimed that the Medical Department of our University was admitted to be in advance of other schools. We did not claim, though we might have done so, that it was so admitted, but simply stated the fact. Dr. Cabell, however, in his report, seemed to carry this idea, as will appear from the following passage: "An exposition of some of the

peculiar features of this institution, as contained in the report of Dr. Pitcher, read at the last annual meeting of the Association, appears to have met with the unqualified approbation of the members then present. Let it be observed that most of those peculiar advantages are incidental to the long-term system, and to that alone."

In uttering the sentence which we have above repeated from our remarks on Dr. Cabell's report, we are accused in effect by one whose word with many will have weight, of false pretences, and untruthful—even arrogant, statements—and in order to test the matter, we must examine the several reforms Dr. C. advocates, and in which we stated the University was in advance of other schools, and compare the position of this School with others in the country, taking Rush Medical college as a type. Certainly our friend will contend that this School is not behind the average. By this means we shall see whether we have arrogantly falsified—and whether the Journal's statement is true or false, that the only foundation for this "flourish," is in the statement of Dr. Pitcher, quoted by Dr. Cabell, that it was in contemplation to adopt the same standard of qualifications for admission to the Medical as to the Literary Department of the University.

The first reform urged in Dr. C.'s report, is the exacting of a higher standard of preliminary education of medical students.

On this point, Rush Medical College exacts nothing of one who joins their class, but the registration of his or her name, and the payment of the ticket fees, if he or she attends the lectures. That Institution admits to the graduating class all who have studied the usual time, attended two courses of lectures of sixteen weeks, and who writes and hands in a single thesis, which is seldom, perhaps, read—never by the student before the Faculty or class.

The University of Michigan feels at present under obligation to admit to the *lectures* all who possess a good moral character, and pay the matriculation fee of ten dollars. Those however who are admitted as candidates for *graduation*, must present themselves at the *commencement* of their second course of lectures, or after four years of *reputable* practice—show that they have studied medicine the proper length of time—must either present clear evidence, by certificate from competent sources, that they have "a good English education, a knowledge of natural philosophy, and the elementary mathematical sciences, including Geometry and Algebra, and such

an acquaintance, at least, with the ancient languages, as will enable the student to appreciate the technical language of medicine, and read and write prescriptions;" or in case such evidence is not thus furnished, the candidates must submit to an examination on preliminary education by a committee of the Faculty. The candidates for graduation must also at the beginning of the term pass a satisfactory examination in Anatomy, Chemistry, Physiology and Materia Medica, and once in from two to four weeks during the entire term, must present to the Faculty, and read and defend before them and such of the class as choose to attend, a thesis on some medical subject, as well as present a final thesis, upon which they must pass a public and rigid examination, usually from half an hour to an hour or more in length. In all these written exercises, originality of composition, correctness of language and doctrine, and precision of thought are required, and imperfections are pointed out and commented upon. This ordeal of writing and public reading, is a more thorough test of "preliminary education" than can well otherwise be afforded.

So much for a comparison on the point of preliminary education with other schools, Rush Medical College being the type.

The second point urged by Dr. Cabell is the lengthening of the term of lectures, and the delivering a fewer number per day.

The lecture term in Rush Medical College continues *sixteen weeks*, or a little less than *four months*, with six lectures per day.

The lecture term in the Medical Department of the University of Michigan continues *six months*, with four or five lectures per day.

Dr. C.'s report next advocates a system of private instruction, or private schools. This point has no particular bearing upon the subject in question. It may however be mentioned, that there is now in progress in the University, as ummer course of *practical chemistry* or chemical manipulations, in which a good class of students is receiving systematic and extended instruction by the Prof. of Chemistry in the University Laboratory, with no additional expense to themselves except for materials consumed; and during the lecture term, the Prof. of Anatomy, with several fine microscopes, shows the class in sections the structures he describes.

The fourth improvement Dr. Cabell urges, is thorough daily examinations upon the lectures of the preceding day.

This is only done in a partial and limited manner in Rush Medi-

cal College, and by only a part of the Professors.

In the University of Michigan, this is thoroughly carried out by all the Faculty.

The fifth point which Dr. C. makes in his report, is respecting clinical instruction. On this subject he teaches that clinical instruction cannot possibly be given with advantage before the student is well grounded in the principles of medicine, and to no student while he is listening to six lectures per day besides. He further urges that the students should watch the cases daily from the beginning to the end, and should refer to books, reading carefully from practical works and clinical reports respecting each case.

All the clinical instruction given at Rush Medical College is during the lecture term, and for a few days before its commencement, and to students who have not completed their elementary course; and in an editorial in the *North-Western Journal* a few months ago, this same Editor and Professor, who must be regarded as the organ and authority of his School in clinical medicine, absolutely scouted at, and ridiculed the idea of the student's watching at the bedside of the sick, and reading in the books, with the patient before him, descriptions of similar cases!

Though the University has no hospital in connection with its Medical Department, the students are earnestly recommended to visit patients with their preceptors during the vacation of lectures, thereby obtaining a view of diseases as they actually exist in private practice; or to attend during this vacation or after completing the college course, upon instruction in the wards of a well-regulated hospital.

With regard to the standard of requirements in strictly medical knowledge for the degree of M. D., any statement we might make from personal knowledge of the practice of the two schools in this respect, could only be regarded as testimony from an interested party, and we will forbear. We must leave the Profession to judge whether, in accordance with the principles which our friend at one time so strongly put forth, viz: that the consideration of the graduation fee would almost necessarily influence the vote of Professors, will operate most on those who, as in Rush Medical College, receive such fees, or upon the Professors in the University of Michigan, where no such fees are received.

We shall now leave our readers to decide respecting the candor

and truth of the Journal's assertion that our statement, to the effect that the University of Michigan was in advance of other schools in the country in the reforms which Dr. Cabell pointed out, is founded merely on "contemplations," is an "arrogant flourish" and "baseless pretension." We shall leave them to judge whether we have not fully demonstrated, by comparison, the truth of our original statement, that the University of Michigan is in advance of the other schools, in the reforms advocated by Dr. Cabell's report..

The Journal says in closing, that our remarks "indicate a very weak spot somewhere." Our readers will further judge whether that "weak spot" is in us and the school with which we are connected, or whether it is in the unfortunate position of the Editor of the North-Western Journal, in his candor and fairness, and the school with which he is connected—a school so wedded to the old system, that all the power of the American Medical Association has been inadequate to induce it to adopt a single reform, which the honor of the Profession, and the interests of humanity, so imperatively demand.

CORRECTION.—We have received a note from Prof. F. H. Hamilton, of Buffalo, stating that his remarks in the American Medical Association on the subject of "The frequency of deformities in fractures," have been incorrectly reported in the Medical Journals. In most of them he is made to say without qualification, that to mend a fractured *femur* without shortening the limb, is an impossibility. He intended to say, and thinks he said, "that such a perfect union is rare—and that it seldom if ever occurred except in cases of transverse fracture, and in fractures occurring in children." He further says in his note—"My own fracture tables show a considerable number of cases where this bone has united without shortening, but such cases are exceedingly rare. The *rule* is that shortening must occur; and I say *positively* that in an *oblique* fracture of the shaft of the femur, occurring in an *adult*, a union without shortening is *impossible*. It is not *impossible* near the lower end where the bone is very broad, unless the fracture is quite oblique, or has a particular direction. It is not impossible when the neck is impacted; yet it is not probable even then that the limb will not be shortened."

He also complains that the Journals say that his "report" was upon fractures of the femur alone, while he spoke of the fractures of the femur only incidentally.

We cheerfully give place to this correction, as we are fully aware from personal experience that remarks which are made extemporaneously before large audiences, and briefly reported amidst hurry and excitement, often appear in print in a form scarcely to be recognized by their reputed authors. In the excitement of extemporaneous speaking, there may not be the same precision and clearness as in closet productions, but the greater fault is usually on the part of reporters. In the present case Dr. H. had a written report, which will be published in the volume of Transactions, and from which were read extracts, but various extemporaneous comments and remarks were interspersed at different points.

The subject is an important one, especially to Surgeons, and Dr. H. has given it much attention. His remarks before the Association were well received.

Observations on Wounds of the Heart. By SAMUEL PURPLE, M.D.

This is a pamphlet of thirty-two pages, containing in a tabular form the results of wounds of the heart thus far known. The tables contain forty cases, with the symptoms, the appearances of the wounds, and the results. Four of the cases recovered, and the others lived various times, from a few minutes to many weeks.

The conclusion of the author is that wounds of the heart are not always by the medical jurist to be pronounced *necessarily mortal*, and that the fatal result is neither so sure, nor so speedy as is generally believed.

First Years of Practice. By FRANKLIN TUTHILL, A. M., M. D.

This is the title of a beautiful address delivered to the graduating class of the New York Medical College. The style is classic, and the thoughts fine.

Protracted Valvular Disease of the Heart. By JOHN W. CORSON, M. D., Physician to the New York Dispensary, &c.

This is a pamphlet from a very carefully written article which appeared in the N. Y. Journal of Medicine. It contains a great amount of information.

Rushton's Treatise on Cod-Liver Oil.—A popular essay written to promote the sale of the medicine.

Chemical Analysis of the Tennessee Collection of Urinary Calculi.
By E. B. HASKINS, M. D.

The collection which was analyzed contained one hundred and eighty specimens, the qualitative analysis of which this excellent pamphlet describes.

Oration delivered before the Physico-Medical Society of New Orleans. By A. MERCIER, M. D. P., Surgeon of Circus Street Hospital.

This oration is a bombastic eulogy of American surgery.

Cases of Polypus of the Womb. By WALTER CHANNING, M. D.

A very excellent monograph re-published from the Boston Medical and Surgical Journal.

Reed & Co.'s Circular.—J. H. Reed & Co., of Chicago, keep a splendid assortment of Artificial Eyes, and of Tiemann's Surgical Instruments. See the cover.

The Medical Counsellor—edited by R. HILLS, M. D., Columbus, Ohio. A capital Journal, which we are glad to get at last.

Portrait of Prof. Flint.—We have received, through the politeness of the Buffalo Journal, a copy of a large and beautiful lithograph of Prof. Flint, former Editor of that monthly. The work was executed at the order of some of his warm admirers in Buffalo.

ANNOUNCEMENTS.—We have received the following announcements and catalogues:

St. Louis Medical College.—Anatomical rooms opened October 1st; lectures commence November 1st.

Female Medical College of Pennsylvania—Located in Philadelphia. Graduated six students last session. Next session commences October 3d, and continues five months. Two courses in Practical Anatomy exacted of candidates for graduation.

Starling Medical College.—Session commences October 18th, and continues twenty months.

Medical Department of the University of New York.—Lectures commence October 15th, and close March 1st.

Medical Department of the University of Louisville.—Lectures commence October 29th, and close March 1st.

Baltimore College of Dental Surgery.—Session opens October 1st, and closes March 4th.

MISCELLANEOUS.

White Indians.—Dr. Geo. Lathrop informs us that north of Washington Territory there are Indians of fairer complexion and more Caucasian features than those in the latitude of Olympia. Some of them have red hair, and all of them are very high in the natural power of intellect. Their manufactures display superior mechanical capabilities, specimens of which he has obtained. As the neighboring coasts of neither Asia nor America furnish any race which could have originated this variety by intermarriage, it goes to show that in spite of Gliddon and Nott, climate and other influences may transform races.

Saccharine Carbonate of Iron and Manganese.—The following is the formula for this preparation, alluded to in No. 17 of this Journal (page 361,) as originally proposed by Dr. S. T. Speer, of Edinburgh. (See London Medical Times and Gazette, for Dec 10th, 1853.) Take of finely powdered sulphate of iron, *three ounces and one drachm*; carbonate o. soda, *five ounce s*; sulphath of manganese, *one ounce and one scruple*; white sugar, *two and one half ounces*. Dissolve each of the three first mentioned ingredients in a pint and a half of water, add the solutions and mix them well. Collect the precipitate on a cloth, filter, and immediately wash it with cold water. Squeeze out as much of the water as possible, triturate the pulp with the sugar, previously reduced to a fine powder. Dry it at a temperature of about 120 deg. Fahrenheit.

The dose is from kve to twenty grains, thrice daily, with the meals, or at least immediately after. It is prepared in Boston, by Mr. Woods, 51 Tremont street.—[Boston Med and Surg. Journal.

A Novel Medical Firm.—In one of the leading thoroughfares of Paris, the following inscription, on an attractive sign-board, arrests the attention of the passers by: "Consultations gratis: from 8 A. M. till noon, treatment conducted on the principles of ancient medicine; from noon till 4 P. M., on those of homœopathy; and from 4

P. M. till 8 P. M., on the method of M. Raspail." What follows fully explains the charitable nature of the consultations.—"There is a pharmacy on the premises."—[Edinburgh Monthly Journal of Medicine, May, 1855.

This is no more absurd than the question often addressed by homœopaths to those who employ them: How will you be treated, by the usual or old method, or homœopathically? In addition to the stultifying nature of the query which virtually makes the practitioner what to be sure he usually is, a nullity, the *dishonesty* of the procedure is manifest; for surely *one* of the systems must be false, they being antipodal to each other—but such a practitioner leaves his patient the choice!—[Boston Medical & Surgical Journal.

Absence of Pericardium.—A specimen was exhibited to the Pathological Society of London, by Dr. Bristowe, "in which the heart and left lung were enclosed in one serous cavity. On the right side of the heart was the diverticulum, which appeared to be a rudimentary pericardium. It was contained in front and behind some way over the vessels at the base of the heart. The patient had died of mitral valvular disease, with congestion and œdema of the lungs, with jaundice."—[Association Medical Journal, Jan., 1855.

German Universities.—During the past winter 18,201 students matriculated in the 28 Universities of Germany; 847 regular professors, 253 professors *agreges*, 46 honorary professors, and 450 masters of particular subjects and languages: in all, 1699 persons superintended the instructions. Considerable variation has been observed in the number of students; thus, during the winter of 1851-2 the number rose to 19,354, the summer following it was 17,810: in the winter of 1851-3, 18,576, and during the succeeding summer 17,905. The total number of strangers attending these Universities is estimated at 2,711.—[Cologne Gazette, in Edinburgh Monthly Journal, May, 1855.

Death of an American Physician.—The Providence Journal mentions the death of Dr. Isaac Draper, Jr., an American Surgeon in the Russian service, and son of Isaac Draper, Esq., of South Attleboro', Mass. He died at Sebastopol on the 20th of March, of typhus fever, after an illness of four weeks. He was 32 years old, and graduated at Brown University in 1844.

Tasteless Infusion of Senna.—Dr. Brandeis recommends a cold infusion of senna for 12 hours in a covered vessel, as especially useful in infantile therapeutics. By this modification of the process usually employed, the water contains only the cathartic and the coloring matter, leaving the essential oil, the fatty matter and the irritating resin, which are soluble only in hot water. Senna water thus prepared cold, is almost insipid, and its taste completely disappears when mixed with infusion of coffee or tea.—[Archives Generales de Medicine, for April.

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NO. II.

ORIGINAL COMMUNICATIONS.

ART. I.—*A Lecture on the Effects of Alcoholic Drinks on the Human System, and the duties of Medical Men in relation thereto: Delivered in Rush Medical College, on Christmas Day, 1854, in compliance with the request of the Class.* By N. S. DAVIS, M. D., Prof. of Pathology, Practice of Medicine, and Clinical Medicine.

This is a pamphlet of 31 pages which we find upon our table, consisting of an article from the *North Western Medical and Surgical Journal*, done up in a separate form.

At the present time, when most of the States of the Union have either passed prohibitory liquor laws, or are agitating the propriety of doing so, the question of the essential action and effects of alcoholic drinks on the physical system, becomes one of peculiar interest. It is indeed intrinsically a subject of the most profound importance; for, whatever opinion may be held respecting the moderate use of these drinks, no one will deny that they are liable to the greatest abuse, and that such abuse is attended with the most terrible consequences, not only to the physical but to the mental and moral constitution, and to the welfare of society at large.

The question of the physiological effects of alcohol on the system, is of such special importance in relation to the popular move-

ment of prohibition, because if it be acceded that these effects are useful, or indeed innocent to any considerable number of persons, affording them at the same time gratification, the justice of such legal prohibition might with much plausibility be questioned; for however strongly it might be urged under the "higher law" of Christian obligation, that "we should eat no meat, or drink no wine if it cause a brother to offend," yet it might be questioned whether human legislators have a right under any ordinary circumstances to prohibit one portion of community from the enjoyment of a good, because another abuses that good, and converts it into an evil. If the use of alcoholic beverages is a physiological good—if these articles promote health, prolong life, increase the usefulness or happiness of any considerable number when moderately used, then may the right to prohibit such use be plausibly questioned, even though the balance of general good may greatly predominate in favor of disuse. But if alcohol be essentially and emphatically a poison—if its legitimate physiological effects be injurious—if it essentially tends to obstruct and derange the actions of life, and fails to promote the happiness and well-being of any, while it is known to produce much positive misery and ruin, then can the right of prohibition be established beyond all contradiction or cavil, and the single question of practicability or expediency is alone to be settled.

The address before us takes the ground strongly and maintains it ably, that the legitimate and essential effect of alcohol in its normal state is to obstruct and interfere with the natural and healthy processes of life, and that it can be useful in disease, like other poisons, only by modifying morbid action.

The lecture takes up in their order the three modes in which alcoholic drinks are supposed to produce their beneficial effects, and examines them carefully and rigidly. These are stated to be the following:

"1st. Their direct stimulant effects on the nervous system, by which the mind is excited and all the bodily functions supposed to be invigorated.

"2d. Their supposed power to sustain respiration and animal heat, by furnishing carbon and hydrogen for combustion with the oxygen of the blood.

"3d. Their supposed power to protect the animal system against the effects of contagions and the causes of epidemic diseases."

It complains that the information given by writers on *Materia*

Medica concerning the action of alcoholic drinks is meager and unsatisfactory, and proceeds to discourse upon the subject in a manner which we hope will be regarded of sufficient interest to justify the following somewhat lengthy extracts :

Being generally ranked at the head of the class called "diffusible stimulants," we are simply told that when taken into the stomach they are absorbed with but little or no change, and entering the blood, excite the nervous and vascular systems, exhilarate the mental faculties, and, if taken in moderate quantities at meals, promoting digestion and the general strength of the system. In addition to this, a class of chemico-physiological writers, with Baron Liebig at their head, recognizing alcohol as a highly carbonaceous compound, and reasoning from a knowledge of chemical affinities and combinations outside of the living animal system, have claimed that it, like all the carbonaceous elements of our food and drinks, was appropriated directly to the support of respiration and animal heat by combining with the oxygen received into the blood through the lungs.

But neither the ordinary writers on *Materia Medica* nor the chemico-physiologists furnish us with any carefully devised and well executed series of experiments, illustrating the correctness of the views they entertain; the first seeming to derive their ideas from the *feelings* induced by alcohol, and the latter from purely theoretical notions, coupled with vague generalities.

So far as I recollect, Dr. Prout was the first to institute direct experiments for the purpose of ascertaining the effects of alcohol on the functions of the system. By collecting the expired air soon after alcoholic drinks had been taken into the system, he ascertained that it uniformly contained much less carbonic acid gas than before the drink had been taken. More recently similar experiments have been made by Sandras and Bouchardet, and several others, and with the same results as obtained by Dr. Prout. In the meantime, the direct observations of Beaumont on the human stomach, and the experiments of Dr. Percy and others on animals, clearly proved that the alcoholic liquids not only disappeared from the stomach in a very short time after they had been swallowed, but that they actually entered the blood and circulated with it through all the tissues of the body with so little change in the composition or qualities of the alcohol, that its presence could be detected in the substance of the brain, liver, &c. Very recently Duscheck has made some experiments, from the results of which he claims that the alcohol on entering the blood undergoes a change, by which an ethereal substance is formed, which he calls aldehyde, and to which he attributes the exhilarating effects which follow the use of intoxicating drinks. The same observers have shown, both by experiments on animals, and by *post mortem* examinations of such as have died from the direct effects of the stronger alcoholic drinks, that the blood

does not undergo the usual change in the lungs, it having been found throughout the vascular system of a dark venous color. From all these experiments and observations it is evident that the alcohol taken into the system, exerts not merely a temporary exhilarating effect on the functions of the brain and nervous systems, but also induces important changes in the blood and vital properties of all the tissues. These changes consist in a diminished exhalation of carbonic acid gas from the lungs, diminished arterialization of the blood, and diminished sensibility both organic and voluntary. The marked diminution of carbonic acid in the expired air while under the influence of alcohol, seemed to militate strongly against the doctrine that the latter underwent combustion in the blood or lungs by furnishing carbon for the oxygen inhaled. But Liebig and his followers endeavored to obviate the objection, by suggesting that the oxygen united more particularly with the hydrogen of the alcohol, thereby forming water and emitting caloric; and hence still claiming it as a supporter of combustion and animal heat. M. Duschek, who is one of the most recent experimenters on this subject, gives us the following conclusions, viz :

‘1st. Alcohol in the organism is subservient to an increased combustion, the intermediate products of which are found in the blood. 2d. Intoxication is dependent upon the existence of aldehyde in the blood at the time. 3d. The effect of aldehyde upon the blood is that of rapid consumption of oxygen; but thereby the combustion of other substances is interrupted or rather diminished.’

On these conclusions, the London Lancet for April last, has the following comment, viz :

‘In these short remarks, the reader will at once perceive the most powerful inducements to abstain from alcohol. It runs away with that oxygen which he is always inspiring for the oxidation which is required in almost every process in the animal economy. We live as it were to oxidize. Almost all the changes in the body are the results of oxidation, *and yet the spirit drinker continually checks this process of nature.*’ In the year 1850, I devised a series of experiments designed to test more fully the effects of alcohol on the functions of respiration, circulation and animal heat. These experiments, commenced in the winter of 1850, have been continued from time to time since. The apparatus for performing the experiments consisted of a glass tube, graduated so as to indicate the fractions of a cubic inch; a very delicately graduated thermometer; a mercury bath, and a solution of caustic potash. With these arrangements, and an intelligent assistant, in a room of equable temperature, about three hours after any food had been taken, from three to four ounces of the best brandy that could be procured was administered. But previous to administering the brandy the temperature of the body was carefully noted by inserting the bulb of the thermometer under the tongue, with the mouth closed around

it for several minutes. A certain number of cubic inches of expired air was also collected in the graduated tube over mercury, and transferred from this to the bath of caustic potash, by which the amount of carbonic acid was rapidly absorbed, and its quantity indicated. Having ascertained and noted the temperature of the body, the proportion of the carbonic acid in the expired air, and the frequency of the pulse before the brandy was taken, these same observations were made in precisely the same manner every thirty minutes after, until three or four hours had elapsed. In some of the experiments brandy was used as a representative of the stronger distilled liquors; and in others port wine was used, in quantities of eight ounces as a dose, to represent the fermented liquors.

The results of all my observations may be summed up as follows, viz :

1st. The most direct and obvious effect of alcohol on the human system is, to excite or exhilarate the functions of the brain, and increase the rapidity of the heart's action. This effect begins to be manifest within thirty minutes after the liquor is taken, and, if the dose is not repeated, perceptibly declines in from one and a half to two hours. It is the exhilarating influence of the alcohol on the brain and nerves that gives it its fascinating power over the human appetite and passions, and has induced in the popular mind the general idea that it is actually tonic, or supporting to the functions of life. The stimulant effect on the vascular system is much less than on the nervous; the pulse being increased, in my experiments, not more than from six to ten beats per minute, while its fullness and force both remained unaltered.

2d. It directly diminishes the amount of carbonic acid gas thrown out from the lungs in the expired air. This diminution begins to be apparent in less than one hour after a single dose of alcoholic liquor, and becomes more and more so until the end of two hours: when the proportion of carbonic acid begins again to increase, and at the end of two hours comes fully up to the natural proportion. The amount of diminution of carbonic acid varied in different experiments, but was well marked in all. In some instances it was diminished, for a short time, more than fifty per cent below the proportion when the experiment began.

3d. In all my experiments the temperature of the system began perceptibly to diminish at the end of one hour, and continued to do so during the succeeding two hours, the mercury generally standing *three quarters of a degree* lower at the end of three hours than when the experiment began. And at no period of time while the effects of the alcoholic beverage remained perceptible, was there any *increase* of temperature indicated by the thermometer.

It will be seen, by examining the detailed account of the experiments given in the Appendix, [omitted] that the exhilarating effects of the alcohol on the nervous tissues, and its diminution of the exhalation of carbonic acid from the lungs, are both manifested con-

siderably before any alteration is noticed in the temperature.

The latter, however, continues to diminish for some time after the proportion of carbonic acid begins again to increase. The effect on the pulse is noticed very soon after the alcohol is taken, being first rendered more frequent, but only for an hour or an hour and a half, when it comes back to its natural standard, and in some instances falls below.

From all the experiments thus far instituted, it is plainly evident that a moderate quantity of alcohol in the blood directly excites or exhilarates the functions of the brain, while it diminishes those of respiration and calorification.

I wish, gentlemen, to attract your attention particularly to the influence of the agents which form the subject of this lecture on the three great processes just named. Their influence on the functions of the brain and nerve tissue has long been known and universally acknowledged. Their effect in diminishing the proportion of carbonic acid gas exhaled from the lungs, and thereby lessening the natural process of respiration, was first directly demonstrated by Dr. Prout, and is now universally acknowledged. Their effect in diminishing the production of animal heat, was, so far as my knowledge extends, first clearly demonstrated by my own experiments, and shows an influence directly opposed to the prevalent opinion, both in and out of the medical profession. Seeing the prominent exhilarating influence of alcoholic drinks on the brain, and the patient or drinker feeling a sensation of warmth in his fauces and stomach, and soon after also a glow of heat in the face, nothing was more natural than the inference that they actually increased the temperature of the body.

No distinction, of course, was made here between the *feelings* or mere nervous sensations of the individual and his actual temperature; and hence arose the universal popular belief in the power of such drinks to increase animal heat, and consequently also in their value to man when exposed to the mere vicissitudes of temperature. When a knowledge of organic chemistry became more generally diffused, and alimentary substances became classified into *nitrogenous* and non-nitrogenous or carbonaceous, the former assigned as the chief agents for nourishing the tissues, and the latter for supporting respiration and animal heat, alcohol was regarded as one of the most prominent articles of the latter class, and, of course, directly calculated to support both of the last named functions.

It was thus that the theoretical inferences of the learned were made to coincide with, and apparently to corroborate those derived from the sensations of the drinker; and both were hence made to contribute largely to the continuance of those customs in society which are annually sending several thousand American citizens to untimely and dishonored graves. And yet the industrious student will not fail to perceive that these opinions, which have thus held

a predominating influence over the popular mind from generation to generation, are purely hypothetical, and without a single experimental fact for their support. I am aware that some will be disposed to deny this assertion, and to allege that the experiment of taking alcoholic stimulants, when exposed to extreme cold, has been tried times without number, and with the effect to make the drinker *feel* warmer than before; and that this furnishes positive proof of the power of such stimulants to increase animal heat. That a glass of brandy will soon produce a feeling of warmth in the fauces and stomach, and sometimes in the face, I fully admit. But is this proof that the temperature of the tissues of the body is actually increased? Does not the patient, with spasmodic cholera, almost constantly complain of the heat, and plead for cold water—ice cold water—even when his whole body, and the very breath from his lungs, are cold as death itself? Are his feelings, under such circumstances, any index of the actual temperature? Certainly not. Again, a patient, under the influence of chloroform or ether, revels in a world of dreams, and perhaps pleasing fancies, all unconscious of the fact that his limbs are being severed from his body, or his flesh extensively lacerated in the extirpation of morbid growths; but is it any proof that the limb is not severed because the patient did not feel each stroke of the surgeon's knife?

So, too, when alcoholic drinks are taken into the stomach, a sensation of warmth is felt in the stomach and pharynx, and, as the fluid enters the blood, and, through it, comes in contact with the brain and nervous tissues, its direct exciting effect is accompanied by a sensation of heat in the face, and a diminished consciousness of the presence of a material body.

But this *feeling* of heat in the face, pharynx, and stomach, under the influence of alcoholic drinks, is no more evidence of an actual increase in the temperature of the body than is the absence of pain, on the part of the patient, under the influence of chloroform, evidence that the surgeon's knife has not severed the tissues. In both instances the brain and nervous tissues are under the influence of an agent which alters their sensibility, and renders the individual incapable of judging correctly concerning the impression of external agents upon him.

Hence the alcoholic drinks, instead of protecting the individual against the effects of external cold, only render him less conscious of the existence of such cold, and thereby often induce him recklessly to remain exposed until fatal effects are produced. So true is this that nineteen twentieths of all those who are frozen to death in Christendom, are so while under the benumbing influence of alcoholic drinks, taken under the delusive idea of "keeping them warm."

I am fully assured that no fact in the whole science of medicine is susceptible of a clearer demonstration than that alcoholic liquors,

taken into the human system, exert a direct and important influence over the three great functions of innervation, respiration, and calorification.

The first it temporarily excites, accompanied by a still more temporary excitement of the circulation, while the two latter are directly and positively diminished, accompanied ultimately also by a diminution of the *first*. Let us now examine a little more in detail the *modus operandi* by which these results are produced. Dr. Henry Parker, of this city, a former pupil of mine, in a prize essay presented to the Illinois State Medical Society, thus sums up the mode by which alcoholic drinks produce the effects I have described, viz :

“1st. By their great affinity for, and absorption of the oxygen of the blood, thereby interfering with its agency in the formation of plastic material, and impairing the organizability of those compounds designed for nutrition and reproduction.

“2d. By preventing or retarding that vital change—the *conversion of venous blood into arterial*, and diminishing the functional activity of the secreting and excreting functions generally, thus causing a retention and accumulation in the blood of effete and excrementitious compounds.

“3d. By retarding capillary circulation and the metamorphosis of the tissues.”

That alcohol possesses an affinity for oxygen, and readily enters into combination with it under favorable circumstances, is well known. M. Bouchardet, from his experiments, first supposed that the alcohol meeting the free oxygen received into the blood through the lungs, combined with it in such proportion as resulted in the formation of acetic acid and the disappearance of the alcohol. M. Duscheck more recently contended that the latter, by its first union with the oxygen, resulted in the formation of aldehyde, which, however, maintains but a temporary existence, being, by further combination with oxygen, converted into acetic, oxalic, formic, and carbonic acids. It was this supposed union of alcohol with the oxygen of the blood that led Liebig and his followers to regard such union as a *combustion*, and consequently the alcohol as a strong supporter of animal heat. But, admitting that the union takes place, (of which we are not quite certain,) their conclusion by no means necessarily follows. No fact in science is better established than that the free oxygen in the blood is the great vivifying or life-sustaining agent, which, by its presence, maintains the susceptibility and action of all the tissues of the body, and, by its chemical combinations, facilitates both the nutrition and metamorphosis of the tissues. Neither is any fact better established than that the natural temperature of the body is sustained by these same processes. Hence if it were true, as represented by Liebig, Duscheck, &c., that the alcohol entered into direct combination with the oxygen of the blood, and even developed sensible caloric by

so doing, such development would be more than counterbalanced by the diminished quantity resulting from those organic processes, which are directly impaired by the diversion of oxygen from its natural and healthy offices in the economy. Whether or not the alcohol taken into the system actually enters into combination with the oxygen of the blood, thereby diverting it from its natural affinities and uses, it is certain that its presence in the blood causes a rapid accumulation of carbonic acid in that fluid, and a decided diminution of the change from a venous to an arterial hue as it passes through the pulmonary organs. Thus, Dr. W. B. Carpenter, the author of a large and standard work on Human Physiology, says that M. Buchardet found, "when alcohol is introduced into the system in excess, the blood in the arteries presents the aspect of venous blood, showing that it has been prevented from undergoing the proper oxygenating process." The same dark, venous color of the blood in the arteries was observed by Percy, and many others, both in experiments on animals, and in post mortem examinations of persons who had died while strongly under the influence of the stronger alcoholic drinks. Indeed, plain evidence of this want of proper change of the blood from venous to arterial color may be observed in the dingy and leaden hue of the countenance, the purple color of the lips and nails, and the slow circulation of the blood in the capillaries of the surface, of persons in a state of profound intoxication. The dark color of the arterial blood, together with the diminished elimination of carbonic acid gas from the lungs, while under the influence of alcoholic drinks, demonstrates, beyond all cavil or doubt, the depressing influence of these drinks on the function of respiration, and the vital changes which accompany it.

This effect on the respiratory function is not fully explained on the supposition of Liebig and Duscheck, that the alcohol unites directly with the oxygen of the blood, thereby forming new compounds, consisting chiefly of acetic and carbonic acids and water. It might explain the increase of carbon in the blood, and the diminished arterial color, but does not furnish a satisfactory reason why the amount of carbonic acid thrown off with the expired air so rapidly diminishes. Its mere increased accumulation or formation in the blood, should lead rather to an increased elimination, which certainly does not occur. It is well known that alcohol possesses a strong affinity for animal membranes and albuminous tissues generally; not merely permeating them with readiness, but entering into actual combination with them in such a manner that no ordinary washing or maceration will remove it, and at the same time so altering their structure as to make them appear more dense and corrugated. That the same effect is produced on *living* animal membranes and tissues is rendered extremely probable by many experiments. Thus, if the tail of a tadpole or leech be immersed in alcohol only a few seconds, it becomes stiff as far as the immer-

sion extends, and remains incapable of regaining either its flexibility or excitability. The same rigidity is produced by immersing frogs and puppies; but with them the effect slowly subsides if the immersion is not too long continued. Humboldt found the direct application of alcohol to the larger nervous cords of the frog to produce, first a very temporary excitement, followed by an entire loss of action and *excitability*.

These facts, taken in connection with the rapid diminution of exhaled carbonic acid, and the positive diminution of the temperature, as proved by my own experiments, leave very little doubt but that the alcohol exerts an influence, immediate and direct, on the tissues of the body, from the strong affinity it possesses for the albumen which enters so largely into their composition.

The immediate effect of this affinity is to arrest or retard all the more minute molecular changes which are constantly taking place in the healthy state of the living tissues. So long as it maintains its existence and direct affinity for the tissues, its presence excites or exhilarates the brain and nerves, accompanied by a diminished consciousness of outward objects and impressions. These are the primary effects of alcohol on the system; and while they continue they constitute the period of intoxication or apparent excitement. But its contact with the oxygen of the blood at a temperature of 97° or 98° F., soon induces a change in its composition, and leads to the formation of those compounds pointed out by Liebig and Duscheck. This constitutes the second period in the action of alcoholic drinks on the system, and is characterized by a rapid diminution of the cerebral exhilaration, and the final occurrence of mental depression, muscular weakness, loss of appetite, and a return of the full proportion of carbonic acid in the expired air. Such are the effects of a single moderate dose of alcoholic drink. But when the amount taken is very large, or more moderate doses are repeated at short intervals, the obstruction to the elimination of the carbonic acid from the lungs is more protracted, which causes it to accumulate in the blood to such an extent that the susceptibility of the nerve structures is at length overcome by the venous condition of the whole mass of the circulating fluid, the brain consequently no longer responds to the exhilarating influence of the alcohol, and the individual becomes stupid, unconscious, and lethargic, with slow breathing, livid lips, feeble capillary circulation, and entire muscular prostration.

He is said to be "*dead drunk*." Let the process be carried one step farther, and the blood will be altered to such an extent that the susceptibility of the medulla oblongata will also fail, and life itself will be extinct. If the supply, however, is only sufficient to induce stupid drunkenness, the patient remains in a half comatose or lethargic condition several hours, during which time the alcohol becomes decomposed to such an extent that the air cells and pulmonary tissue, permit again the absorption of oxygen and the elimina-

tion of carbonic acid, by which the blood is rapidly freed from its excess of effete matter, the susceptibility of the brain gradually returns, and the patient awakes from his lethargy with feelings of depression, timidity, and muscular weakness, that last for some time longer. Such are the physical effects of alcoholic drinks on the human system; and they may be summed up in the following concise and simple propositions, viz :

1st. They are rapidly absorbed from the stomach, and enter with the mass of the blood directly into contact with all the tissues of the body.

2d. By their presence in, and the affinity of the alcohol for the tissues, they induce a peculiar exhilaration of the cerebral and nervous functions, while they so alter the membranous structures, including the air cells, that the exchange of oxygen and carbonic acid gases through the latter is much diminished, and all the organic actions so retarded as to induce a perceptible diminution of the temperature of the body.

3d. The alcohol itself, by continued contact with the oxygen and other constituents of the blood, gradually undergoes decomposition, giving rise to the formation of acetic and carbonic acids and water; which, added to the previous interference with the respiratory process, causes the blood to become loaded with effete matter, more venous than natural, and incapable of maintaining the susceptibility and tone of the nervous and muscular structures.

With this, perhaps tedious, examination of the *modus operandi* of alcoholic drinks, you are prepared, gentlemen, to see clearly how far their use is calculated to produce those beneficial effects which have been so generally ascribed to them by a large portion of the people. You can see, with the clearness of demonstration, that, instead of furnishing fuel for *combustion*, and thereby supporting respiration, and increasing animal heat, they primarily depress both these important functions, and directly retard the change from venous to arterial blood. Instead of increasing innervation, and *invigorating* the various functions of the body, we see them merely exerting a peculiar exhilarating influence upon the brain, by which the natural consciousness and susceptibility to impressions are impaired, and the muscular actions rendered feeble and vacillating. In this perverted susceptibility of the nervous structures lies the power of alcohol to deceive the popular mind. With a glass of brandy in a man's blood, he quickly imagines himself as rich as Cræsus, though actually clothed in rags, and as strong as Sampson, though really trembling in every muscle, and his knees smiting each other like those of a disheartened Philistine. So true are the words of the good book, when it says, "*Wine is a mocker, and strong drink is raging, and whosoever is deceived thereby is not wise.*" You can judge, too, how far an agent, or agents, which thus retard one of the most important excretory functions in the the system, diminish the change from venous to arterial blood, and

cause in the latter fluid an undue accumulation of effete or waste matter, and an ultimate depression of all the organic actions, is calculated to counteract the influence of morbid agents in the production of disease.

You readily perceive that all its effects, both direct and indirect, characterize it as one of the most efficient predisposing causes favoring the development of disease in the system, and rendering it more fatal when it does occur. The only exceptions to its deleterious influences are, first, when during the actual progress of disease, there is danger from the direct *failure* of action in the brain and nervous centers, as is sometimes the case in the advanced stages of typhus fevers, when the direct exhilarating influence of the alcohol may be made available for temporarily sustaining the nerve sensibility; and second, when the process of disintegration or waste of tissues takes place much too rapidly, with an active state of the excretory organs, as is sometimes the case in the advanced stage of phthisis, when the power of alcohol to retard organic changes may be rendered beneficial, to a limited extent, in retarding the process of waste.

In order to give a correct impression of the views of the author of this lecture, we have found it necessary to extract so largely from the article itself, and we would urge upon our readers a careful consideration of this whole subject. It is within the power of the Medical Profession to guide public sentiment and action upon this subject to a large extent, and upon that sentiment and action depends an almost boundless amount of human weal and woe.

The lecture closes by urging considerations of personal responsibility as motives for the formation of correct opinions and the performance of proper actions.

Without intending to endorse every shade of opinion contained in the foregoing extracts, we fully agree with most of the conclusions, and commend the whole to the special notice of our readers.

ART. II.—*Singular Death.*

MESSRS. EDITORS :—I have just received a letter from my friend Dr. D. L. Downs, of Orion, Wisconsin, containing a report of an interesting case which lately occurred in his practice. I regret that no post mortem examination was held, as the diagnosis is now very obscure. It seemed to me that the case was worth publishing, and so I send it to you. I give his own words :

“ Since I last wrote to you, I was called to attend a case in parturition, which, from its, to me, singular, as well as fatal result, I will relate. During the month of April, I was called to see Mrs. D., who was pregnant with her eighth child. Nothing peculiar in her appearance. She complained of excessive thirst which had existed for two or three weeks, and at this time she thought water occasioned her some pain. I directed her to use gruel, or put burning coal into the water. This she did, and found relief from it. At two o'clock P.M., on the following day, I was called upon to attend her in child-bed. Three-and-a-half o'clock, or one-and-a-half hours after my arrival, she was delivered of a large, healthy child. Labor short, and not difficult. Placenta expelled in about six minutes. Flowing moderate. Complained of light after-pains—said not more than was her usual custom. I ordered a small quantity of light food, and left for one hour. On my return, found my patient somewhat restless. When questioned, said she had been on the bed so long that she was sore, and could not lie in one position long at a time; complained of feeling somewhat weak. I gave her one-half teaspoonful of brandy, in water, every fifteen minutes. Pulse regular—about eighty per minute. No pain, except some slight pain, as she said, in her bowels. Breathing somewhat slower than natural, and somewhat embarrassed; flowing no more than common. She requested to be turned upon her side, as she had before been. She was placed upon her side. About ten minutes after this, I was standing near the bed, and saw a change, which I cannot describe, come over her countenance; stepped to the bed, and found her pulseless at the wrist; tried to give her brandy, but her jaws were set, and in spite of all the friction we could use, with external stimulants, she expired in five minutes. I do not know the cause of death.

Yours with respect,

J. C. NORTON.

ART. III.—*The Pathology and Treatment of Pulmonary Tuberculosis, and on the Local Medication of Pharyngeal and Laryngeal Diseases frequently mistaken for, or associated with, Phthisis.*
By JOHN HUGHES BURNETT, M. D., F. R. S. E., Prof. of the Institutes of Medicine, and of Clinical Medicine, in the University of Edinburgh, &c. &c. pp. 130.

The Medical Profession of the United States are indebted to

Blanchard & Lea, of Philadelphia, for the re-publication of this work.

The study of Pulmonary Consumption, from a new point of view—that of its curability—is just beginning to awaken an interest which ought to belong to a subject of such great importance.

The incurability of Phthisis, so far as medicine is concerned, had been long acknowledged as a fixed fact, and to it the medical profession had well nigh resigned itself into listless apathy, when from the zealous prosecution of pathological investigations in general, a new and very important fact became apparent, viz: that many who had died of other diseases, were found on *post mortem* examination to have indubitable marks of previous pulmonary tubercles, from which spontaneous recoveries had taken place. From this it became apparent that if the process employed by nature could be discovered and imitated by art, we should be in possession of a true principle of cure.

These views seem to have impressed the philosophic mind of J. H. Burnett, M. D., with great force, and prompted him to zealous and untiring investigations. From 1843 to 1847, he performed and recorded the results of upwards of two thousand *post mortem* examinations, while he held the position of Pathologist to the Royal Infirmary in Edinburgh.

Whenever decided and unmistakable evidence of a spontaneous cure of phthisis came before him, he carefully studied the circumstances which preceded it, and thus he was gradually led to the rules of treatment which are developed in the work before us.

These rules and principles are those to which the most enlightened portion of the profession are now striving to approximate, and the results of which are so often being crowned with so much success.

All have now the rare pleasure of studying the great author on this important subject in his own words,

ART. IV.—*Annual Meetings of the Michigan, and of the National Institutes of Homœopathy.*

The so-called *annual* meeting of the Homœopathic practitioners

of the State, took place at Ann Arbor, as was duly notified in the daily papers, and by handbills. Although this was called an "Annual Meeting," yet, so far as we can ascertain, it has not been held before for several years. If it has, it was not so industriously published as on the present occasion. Nothing has been heard of it before, we believe, since Pres. Blackwood left for California. Probably the hope of making capital in favor of the late Homœopathic act of the Legislature, prompted the present effort. The business part of the meeting did not seem to be public; at least, outsiders who searched for it could not find it. In the evening, however, a public address was delivered. Where the members of the Institute were we do not know. Some half-a-dozen of the slender audience appeared to be Homœopathic practitioners, and the most industrious search could not find any more of the craft in the city during the day. We presume there must have been more somewhere, but after every allowance it was evident that the attendance was wretchedly slim. The attendance of the public was not much better. When the exercises of the evening commenced there were just *forty-five* persons present, men, women and children, all told. During the address others straggled in, and some straggled out—there might have been some seventy-five different persons in the house during the evening. The address was soporific, and the audience spiritless. This is a woful falling off of the public interest in the subject. Some years ago, Mr. Knight, of Pontiac, delivered a lecture here on the same topic, without half the advertising, to a full house of interested listeners. Now, after all the attempt to raise an excitement by handbills, newspaper notices, and fierce articles in defence of the Homœopathic act, this miserably slender audience is got out, showing that the present uproar is made by a few individuals, and not by the public—not even well supported by the Homœopathic practitioners themselves.

It seems that the same decline in *esprit du corps* is felt at the east. The following extract is from the *Journal of Specific Homœopathy*, respecting that national society which aspires to the rank of another National Medical Association. The conclusions respecting the reasons of such a falling off are worthy the fox of sour grape memory :

"*American Institute of Homœopathy.*—The twelfth annual session of the Institute was held at the City of Buffalo, on Wednesday,

the 6th of June. There were but a small number of members in attendance—only seventeen answering to their names at roll call; and though there were several additions by young physicians joining the Institute, at no time were there more than twenty members in attendance, and the second day only about half that number.

“It is a singular fact that, in proportion to the extension and popularity of the system, does the zeal and interest of its members flag in support of its institutions and societies. Thus, while we have some 3000 Homœopathic physicians in the United States, and nearly 300 members of this Society, it is difficult to get a baker’s dozen together at an annual meeting; and while we have, probably, among us 800 or 1000 students, each year, our colleges have been diminishing each session in the number of attendants. From this it should not be argued, that the system is declining, or losing in confidence with its practitioners, but rather that physicians find it more profitable, as well as more agreeable and pleasant, to remain at their posts, looking after the welfare of the sick entrusted to them, than joining in the exercises of such societies.

The proceedings at Buffalo possess no particular importance or interest for the public mind. Indeed, deeply as we feel interested in everything which concerns the welfare of our chosen science, we are unable to call to mind anything beyond some personal matter, of which it is worth while to make a note.

Dr. Skiff, of New Haven, was chosen chairman, and Dr. Dake, of Pittsburgh, secretary. There were some essays and apologies for essays read, and some given out to be read the following year. The next session is appointed at Washington, in June, 1856.

ART. V.—*Constitution of the Michigan State Medical Society.*

ARTICLE I.—*Name and Object.*

This association shall be called the Michigan State Medical Society, and is organized to advance the interests of the Medical Profession, and to promote the cultivation of general science.

ARTICLE II.—*Officers.*

SEC. 1. The Officers of this Society shall be a President, Vice-President, Secretary, and Treasurer, who shall be elected by ballot, and hold their offices for one year, or until their successors are elected.

SEC. 2. The President, at the annual meeting succeeding his election, shall deliver an address before the Society, and he, with the other officers, shall perform all the duties which such officers are

usually required to do. The President shall also have power to call special meetings of the Society, at any time and place—due notice of the same being given.

ARTICLE III.—*Members.*

SEC. 1. The persons constituting this body shall be entitled respectively, Acting Members, Delegates, and Honorary Members.

SEC. 2. Any regular Physician residing in this or adjoining States, or Canada West, may be proposed as an acting member, and if he receive a majority vote, he shall be recorded as a member, on paying to the Treasurer an initiation fee of one dollar.

SEC. 3. Every local Society recognized as auxiliary to this, shall be entitled to send to it five delegates, who, during the time for which they were appointed, shall be entitled to all the powers and privileges of members.

SEC. 4. The Honorary Members shall be such scientific gentlemen, whether lay or professional, as may be elected to that distinction, and shall enjoy all the rights of acting members, except that of voting.

ARTICLE IV.—*Of Meetings.*

The annual meetings of this Society shall be held at the University of Michigan at the time of Medical Commencement, but the Society may adjourn to meet in the interim, at any other place or time.

ARTICLE V.—*Of Transactions.*

The Transactions of the Society shall consist of the Address of the President, the Reports of Committees, the presentation of papers and resolutions, and whatever business affairs the welfare of the Society may require.

ARTICLE VI.—*Committees.*

The President, at each annual meeting, shall appoint a committee of one, subject to the approval of the Society, on every subject which the Society may order, and each member thus appointed, after associating with himself at least two other members, shall proceed to investigate the subject assigned them thoroughly, and the committees thus constituted shall report at the next annual meeting.

ARTICLE VII.—*Amendments.*

This Constitution may be amended at any annual meeting, by a vote of two-thirds of those present.

SELECTIONS.

[From the New Orleans Medical and Surgical Journal.

Experimental Researches into Animal Heat in the Living and in the Dead Body. By BENNET DOWLER, M. D.

Part 1.—Preliminary Views of Existing Doctrines.

Modern physiologists have assumed rather than proved the chemical theory of animal heat. The validity of this purely physical theory is, at least, questionable, notwithstanding the precise formulæ which have been enunciated, whereby the respiratory process is identified with ordinary combustion, the lungs being regarded literally as a furnace, and oxygen as the fuel of the animal economy. Thus, for example, like others, M. Virey affirms that the lungs constitute the sole fountain of animal heat—"le foyer unique de la chaleur animale"—that their repose, as in sleep, causes refrigeration, and that their power of calorification is in the direct ratio to their activity and development. (Dict. de la Conver. t. ii. 308-9.) Dr. Billings in his Principles of Medicine repeatedly calls the lungs the furnace in which charcoal fires constantly burn for the generation of animal heat. Furnace? fuel! fire! How simple, clear, practical, and withal captivating! Such is language of physiologists in general!

In giving an outline of the existing doctrine of animal heat, Dr. Carpenter's physiological works will be quoted chiefly, because of the great esteem in which they are held, and because he is not only the most voluminous but the most recent systematic writer on Physiology in the English language, his works being more generally read in America than those of any other European author. He is, moreover, less dogmatical on the subject under consideration than most writers.

Dr. Carpenter says* that the "respiratory process gives off as much heat as if the same materials were burned in a furnace. Heat seems peculiarly to depend upon those changes in which the function of Respiration is concerned—viz., the union of oxygen derived from the atmosphere, with compounds of hydrogen and carbon existing in the living system. Wherever the aeration of the blood is extensively and actively carried on, there is a proportionate elevation of temperature. And, on the other hand, wherever the respiration is naturally feeble, or the aeration of the blood is checked by

*Principles of Comparative Physiology. *Passim*, 4th Ed., 1854.

disease or accidental obstruction, the temperature of the body falls. When the amount of heat that should be generated by the production of the quantity of carbonic acid found in the air expired during a given time, is carefully estimated, and the oxygen which has disappeared is considered as having been similarly employed in other combustive processes, especially in the formation of water—it is found that the total so closely corresponds with the amount of heat *actually* generated by the animal during the same time, that it can scarcely be doubted that this process is the main source of calorification.” (Prin. Com. Phys., § 452.)

This respiratory theory of animal heat can be easily tested by frequent, full, and forcible inspirations, which, however, will not increase the temperature in the least.

Dr. Carpenter says, “if the supply of oxygen be deficient, as it is when the respiration is impeded by diseased conditions of various kinds, there is a depression of temperature.” (Human Phys., § 115.) A practical physician who relies on his thermometer and not on his theory, will reverse this erroneous conclusion.

In diseases which reduce the respiratory process to the minimum, as in consumption, the heat is often great. The patient with but a handful of the lung permeable to the air suffers from pungent hectic fevers. In catarrh, bronchitis, croup, pleurisy, pneumonia, and the like, the diminished respiration is attended with increased heat during the acute stage at least.

Throughout this investigation, let the reader bear in mind the question of the illustrious Haller, who asks, “Is the blood *cooled in the lungs*? When the lungs are obstructed, ulcerated, and almost destroyed, morbid heat is increased in the body.” (Celxxxii—Celxxxiii. Phys.)

Dr. Carpenter has shown a praiseworthy willingness on several occasions to renounce opinions which he had previously advocated, but which the progress of science had invalidated—a great merit is this in a writer whose influence for good or evil, is immense in both Europe and America. Scientific truths and discoveries, if ignored or rejected by such an author, will seldom be received with alacrity—will often be distrusted—will, perhaps, be denied, especially by such as are incapable or unwilling to examine for themselves. It is easier to adopt than to elaborate opinions by means of experimental, ratiocinative, and inductive methods of research. Incompetence and indolence in taking shelter under the authority of celebrated names, seek to avoid these laborious methods of knowledge, content to let others think, reason, and decide both in doctrinal and practical principles.

Ex parte evidence, as formulæ for the generation of heat by the combinations of carbon with oxygen and hydrogen to the neglect of refrigeratory formulæ such as transpirations and transudations by the skin and lungs, must be regarded as an inconclusive mode of establishing fundamental principles in the physiology of animal

heat. The disintegration, waste, and decomposition of tissues—the elimination of fluids, gases, secretions and excretions, would, with equal industry afford arithmetical tables and calculations quite sufficient to neutralize the heat consequent upon the combination of atmospheric oxygen with the hydrogen, and carbon in the animal tissues. Mere chemistry accounts more satisfactorily for refrigeration than for calorification. Even were it thoroughly proved that a correspondence existed between the quantity of oxygen received in respiration and the degree of caloric evolved in the system, it would not necessarily follow that the former caused the latter. On the supposition that the ratio of oxydation be uniform, the ratio of refrigeration by means of waste, eutaneous transpiration, evaporation, and so forth, might, from various causes be diminished. In many cases of disease impeding the action of the respiratory organs, the temperature of the body is excessively high. In apoplexy, and still more in sun-stroke, there is an excessive elevation of temperature, sometimes reaching 112° . The heat is often excessive in the comatose stage of acute fevers, in which the breathing is infrequent, irregular, and imperfect. In not a few mortal cases of yellow fever, the last stage is characterized by coma, stertor, and an excessively slow breathing, and yet this, above all other forms of death, is attended by a rise, and a persistence of temperature, as will appear in the experimental part of this monograph.

The dog, not to name some other animals, pants and accelerates his respiration in a ratio corresponding to the heat of the weather, being greatest when the air is hottest. If diminished respiration produced diminished temperature, the dog would act just the contrary, influenced as he is by instinct, or fixed reason as a French philosopher would name it; while man, whose reason is in this sense, less fixed and more dynamical, might avail himself of increased and forced respirations to warm himself when too cold, and on the other hand he could restrain the number and fullness of the same acts in order to cool himself when too hot. In fact, he imitates the dog to some extent—by panting and breathing oftener in hot than in cold weather.

Plausible, if not universally satisfactory reasons might be offered, showing that in the healthy state animal heat is evolved not from respiration, but from the dynamics of the nutritive, assimilative, and capillary systems. In certain diseases of an inflammatory character, a morbid nutritive action, with swelling and induration, an increase of heat might be expected from pressure, tension, congestion, obstruction, and consolidation, on the analogical principles of physics. This increase of heat, actually occurs, and whatever be the cause of this morbid manifestation, there can scarcely be a more improbable one named, than that of increased activity of the lungs, and the consequent increased absorption of oxygen. The burning blushes of shame, and, the hot flushings of the early stage of yellow fever, the prolonged and pungent heat of typhus,

erysipelas, scarlatina, and consumption, do not appear to be due to an increased combustion of oxygen in what the chemical physiologists fancifully call the furnace of the whole system, that is, the lungs.

The quantity of air inspired will not by any known process, account for febrile and inflammatory diseases, nor for a single malady in the whole nosology, the formulæ, tables and calculations of chemists to the contrary notwithstanding. The adherents of this theory often show waverings, misgivings and scepticism in the respiratory theory of animal heat. The strongest proof of this is evinced at the bedside where the theory has no practical existence, and where it should be tested. An impeded, imperfect respiration would enable the physician to diagnose the case as belonging to algid diseases, while a free, full, and exaggerated respiration would enable him to pronounce in favor of fever and inflammation with a corresponding elevation of temperature.

Let the physiological chemist who has long labored to prove that the lungs constitute the great heating furnace of the whole body, labor equally hard and long to prove that the lungs constitute the refrigeratory apparatus of the system—let him show that solidification is compensated by liquefaction, the absorption of oxygen by gasification—nutrition by waste, composition by decomposition, oxydation by deoxydation, calorification by refrigeration—in a word let him hear both sides of this question, and although he may steadfastly believe that the evolution of animal heat has a chemical origin, yet he will distrust the opinion that the lungs constitute the fire-place for heating the whole body. He will also find evidences more or less clear, showing that Vitalism towers above physics, self-revealed, reflecting its own peculiar light, transcending, not contradicting chemistry, possessing laws differing from the latter in origin, progress, distribution, and purpose, as much as thinking, feeling, willing and voluntary motion differ from quantitative and qualitative analyses, and from the properties of the material universe.

That the chemists distrust their respiratory theory as insufficient, is inferable from the fact that, not a few of them appeal to other sources for aid, as the nerves, nutrition, and so on. Dr. Carpenter, while he adopts the respiratory theory, endeavors to fortify himself upon some non-respiratory platforms. He says in regard to “the evolution of heat in animals, that among the lower tribes, in which the power of locomotion is but feeble, and the supply of the wants of the system not immediately dependent upon it, very little more heat is generated than in plants. But wherever a high degree of muscular energy is required, in connection with a general activity of the functions of the nervous system, the evolution of caloric to a remarkable extent is provided for in the nutritive processes. We may regard it, therefore, as in *its degree* essentially connected with the development of the Animal powers relatively to the system of

Organic life; although really *dependent*, as it would appear, upon the changes occurring in the latter." (§441.)

This explanation which is entirely superfluous upon the respiratory theory of the origin of heat, is at the same time erroneous. Many animals whose nutritive and muscular actions are great, so far from having a temperature correspondingly high, have little if any independent power of generating heat, but follow that of the medium in which they live, as fishes, the alligator, &c.

The fishes of the Mississippi and Lake Ponchartrain, represent the temperature of the water from which they are taken. Experiments made at all seasons, and repeated for years show that, when the alligator is in the shade its temperature is like that of the air in the same situation, from 33 ° of Fah. up to the maximum of the weather. Its nutritive, muscular, and calorific actions do not correspond in activity, nor do they appear to be connected as cause and effect.

The validity of explanations become suspicious, when a multiplicity of causes which are in no perceptible manner conjoined, are, nevertheless, called in to complete the causation of a particular result. Dr. Carpenter having explained the generation of animal heat by the pulmonary furnace with its fuel and combustion conformably to the prevailing theory, shows a predilection for other methods of explanation, as that of "the direct conversion of Nervous Power into Heat," which he says, "seems not unreasonable." This proposition were it conceivable, would be, at least, improbable. Matter in motion, the dynamical condition, like the statical, might or might not produce heat. But power or force apart from matter is of all the fundamental abstractions the most difficult to conceive. A faint glimmering of this idea is found in the personal consciousness or in the subjective. This is its sole type, and expositor, but does not include the idea of heat. Nor can he be conscious that there is a "Nervous power," much less that this "power is directly converted into heat," in the same way that he is conscious of voluntary motion.

M. Le Gallois, adopting the Lavoisierian doctrine, like the majority of late writers, maintains that calorification is developed in the human economy in exact proportion to the activity of the respiratory function, and the consequent consumption of oxygen. M. Magendie who attributes animal heat to the same source, says, nevertheless, "that the blood in the living vessels is, in truth, almost as directly influenced by the temperature of the atmosphere as the mercury in the barometer!" (Lect. on the Blood, 46.)

M. Magendie asks—"What sense is there in applying the word inflammation to our organs? Do our tissues really take fire? When the blood rushes to a part in abundance, a certain rise of temperature, no doubt, occasionally follows; but it only reaches but a few degrees above the normal standard of the organ and never exceeds that of the blood in the left ventricle." (Ib. 32.) It will be

seen hereafter, in the experimental part of this monograph, whether these views can be maintained.

Sir Benjamin Brodie says animal heat originates in and emanates from the brain—a theory which M. Chossat adopted, though he enlarged it so as to include the spinal marrow, so that, according to him, the heat evolved is in exact proportion to the activity of the nervous system, and decreases in a ratio with the severity of the lesions in that system.

Baron Liebig, one of the greatest of living chemists, whose praiseworthy efforts to subdue physiology and bring it under the reign of chemistry, have proved not altogether successful, offers formulæ and still oftener positive assertions and fine words, from which it would seem that animal heat is a very simple chemical affair, and withal easily understood. In the London *Lancet* for Feb. 1845, he says—“Animal heat which cannot be accounted for by any known physical law, is opposed to the most positive and well established facts, as I shall show. The amount of heat evolved by an animal in a given time, corresponds exactly with that which the oxygen consumed in the respiratory process during that time, would produce if it had combined directly with carbon and hydrogen, as in ordinary combustion!” “An animal, placed in appropriate apparatus, evolves, in a definite space of time, exactly as much heat as the same apparatus would have received, had the oxygen inspired during the same space of time been combined directly in the apparatus with a certain definite proportion of carbon sufficient to form an amount of carbonic acid, exactly corresponding to that exhaled in the same space of time, and with a certain definite proportion of hydrogen sufficient to form an amount of water exactly corresponding to that which we assume to be formed in the organism by that portion of the inspired oxygen which does not form carbonic acid. And thus the question whence the heat of the animal body proceeds is fully answered!”

Some who adopt the respiratory platform of animal heat, believe that the lungs have a higher temperature than any other part of the body. This ought to happen according to their theory, but facts will show that in the human body this theory fails.

If the respiratory theory “accounts for the amount of heat *actually* generated,” why seek for and adopt other explanations of the same thing?

The theory which makes the great nervous center, that is the brain, the generator of animal heat, is disproved as to the human subject, by a greater number of experiments, as the sequel will show, than, perhaps, any individual ever performed before—performed both before and after death—from which it will appear that the brain, which one school of physiologists regard as the focus from which heat originates, has at, or soon after death, a lower temperature than the center of the thigh, the rectum, the abdomen, epigastrium, heart, axilla, &c. The experimental part of this mon-

ograph will show that the lungs, the reputed heating furnace for the system, has not the highest and most enduring temperature as compared with the stomach, liver, rectum, &c.; even the axilla very often greatly surpasses the interior of the chest in heat.

In cholera, which presents the maximum of morbid alidity, the rapid waste, liquefaction, cutaneous transpiration, in connection with the suspension of absorption and the arrest of the nutritive action, will much better account for the diminished temperature of the body than any supposed epidemic impediment in respiration.

If obstructed respiration be the cause or even the invariable precursor of algid epidemics, such as cholera, cold plague, congestive fever, pernicious intermittents, and the like, it is very surprising that no one has recorded this remarkable fact, which must be, if true, very obvious to all, namely, an "impeded respiration," which is the supposed thermometrical standard of animal temperature. The same ætiological negation exists in the history of epidemics of a different type, in which an excessive evolution of heat is the most characteristic feature, as yellow fever, typhus, billious fever, erysipelas, scarlatina, pneumonia, and an host of inflammatory affections, not one of which has been noticed as having been caused by fuller, larger, and more frequent respirations. In neither physiological nor pathological calorification does the respiratory theory of the origin of animal heat afford a satisfactory explanation.

It is utterly impossible to see any direct connection as cause and effect, between the respiratory action and an ophthalmia, a whitlow, boil, erysipelas, or scarlet fever.

Light and shade, good and evil, truth and error, often seem compensative. The physicist who labors to reduce the laws of the human economy to those which govern inert matter, labors under a delusion, which, however, is one of great utility, because in aiming at a real impossibility, he will sometimes conquer an apparent one. The moralist who aims at absolute perfection will probably attain a higher degree of moral excellence, than one whose standard is compounded from the actualities of life among even the most virtuous. The physicist will probably subdue a great portion of physiology without the solutions vaguely adumbrated by the enigmas of vital principles, vital forces, vital essences or entities, which words, or some others must still be used to indicate all that physics cannot as yet lawfully claim, and that all is the sublimest portion of physiology, as sensation, perception, volition, reason, voluntary and involuntary dynamics, &c. Vitalism, even though viewed as an abstraction, or a provisional admission of ignorance, is an essential word, and imports a grand generalization which rises higher than chemical philosophy.

Animal heat, whatever be its cause, appears to originate in all parts of the body—not from the lungs alone—nor from a single focus; nor is it propagated from a single center by radiation and conduction. On the supposition that it has a chemical origin, and

is not an effect, property, endowment, or essential element of life itself, then the assimilative or nutritory process, and that also of metamorphosis and decomposition, all ever present, ever progressive, in every part of the human economy, will afford a more satisfactory explanation of this heat, than the lung theory. Decomposition when its ratio is retarded as compared with assimilation—or when its action is greatly accelerated, as in certain stages of putrefaction, may virtually or directly give rise to heat.

This nutritive platform is sufficiently broad to include all the oxygen actions, reactions and combinations with carbon, hydrogen, and the animal tissues. Indeed the elimination of heat can be better accounted for by the known capillary action than by the respiratory.

The capillary system, *i. e.* its vessels and their contents—the motion of the blood, its friction,—the changes or metamorphoses of the blood-corpuscles, may all with good reason be regarded as sources of animal heat. That heat may be secreted by the capillaries, as bile is by the liver, is not improbable.

All who admit that there is in the economy a residual class of phenomena, properties, and functions not referable solely to chemistry—in a word all vitalists can find little difficulty in attributing animal heat to life, whatever that be.

In his Treatise on the Forces which produce the Organization of Plants, Prof. Draper says that “life is compressed within a range of 180°—between 32° and 212°.” To this generalization there are exceptions. Insects and fish have been frozen without dying. According to some accounts, apparently authentic, it appears that fishes may live in the boiling waters of springs, &c.

Caloric, it has been supposed by some writers, is the cause of all vital phenomena, nutrition, secretion, excitation, motion, energy, organization, being, in fact, the vital principle, life itself.

In a Review of Dr. Metcalfe's elaborate work on Caloric, which appeared in the American Journal of the Medical Sciences for Jan., 1846, the reviewer says: “It has been shown by the experiments of Dr. Davy, that the lungs have a higher temperature than other parts of the body. As this fact has been called in question by other physiologists, Dr. Metcalfe repeated the experiments on sheep and oxen, and found in every trial, that the temperature of the lungs and left side of the heart were from 2° to 3° higher than that of the stomach, liver, &c. The mean healthy temperature of all animals is directly in proportion to the amount of their respiration.” Dr. Metcalfe says, “vital energy, the temperature of the body, and intelligence, are always in direct proportion to the respiratory function. Caloric is not only the cause of all excitement, but directly or indirectly of excitability also. Animal heat is the cause, not the effect of secretion. Caloric is the principle of vitality and the sole cause of organization.” Dr. Metcalfe's “great remedy for inflammation is the application of heat to the part.”

Having given a synopsis of the fundamental principles of Animal heat as now received and taught, it is intended to bring before the reader, in future numbers of this Journal, numerous physiological, pathological, therapeutical, and post-mortem experiments which will confirm or overthrow these principles; or, perhaps these experiments may indicate new questions of high import, notwithstanding the difficulty of their solution.

[To be continued.]

[From the American Medical Monthly.

Selections from Favorite Prescriptions of Living American Practitioners. By HORACE GREEN, M. D.

Tonics and Stimulants.

Although these two agents are here arranged together, and are frequently combined in their administration, yet they differ essentially in their therapeutic effects. Tonics, although not confined in their action to the muscular fibre, are generally defined to be those "medicinal agents which restore relaxed and weakened muscles to their state of healthful tone, which renew their elasticity, contractibility, and tension,"* and thereby impart strength and vigor to the whole system. *Stimulants*, by increasing the sensibility and irritability of the parts to which they are applied, powerfully augment, through the nervous system, the organic actions. Stimulants exalt the functions of innervation and circulation without imparting permanent strength to the system. Tonics give tone and strength to the muscular and nervous system at the same time, without increasing, necessarily, the action of the heart. "Tonics give strength, stimulants call it forth."

The tone or energy of the system which is gradually acquired through the administration of tonics, becomes permanent, and is not replaced by a consequent exhaustion or depression. The introduction of stimulants into the living body is quickly followed by increased energy of the vital actions, and is succeeded as rapidly by a state of depression or collapse. Stimulants are not indicated when inflammation is present, but "tonics, by imparting strength to the capillaries, operate beneficially in inflammation, even when the use of the lancet is requisite to keep down the action of the heart."† Both tonics and stimulants may produce their effects on the system, by making their impression chiefly on the stomach, or

* Thompson's Therapeut.

† Thompson.

by operating through the medium of the blood, or through the medium of the nerves.

As tonics, strictly speaking, are neither stimulant nor sedative, they may be appropriately, and, often, very usefully combined with either. In many cases, where tonics are indicated, and yet from some cause are not well borne, they may be administered, especially the martial preparations, with much safety, and often with great advantage, by combining them with some of the peculiarly sedative medicines. The different forms of iron, whether employed as found in the natural chalybeates, or in the artificial preparations of the chemist, make their primary impression on the digestive organs, augmenting, ultimately, the power of the secretory and excretory systems, and rousing the nutritive faculty in every part of the body.

The following combination of a chalybeate with a stimulant and a sedative has, for many years in our hands, proved a most valuable tonic, particularly when administered during convalescence from disease, and in all debilitated and anæmic cases.

R.	Extracti Conii,	ʒij.
	Sesqui oxydi ferri,	ʒiij.
	Tinct. Columbæ,	ʒiiss.
	Syr. Toluta,	ʒss.
	Ol. Gaultheriæ,	gtt. x.
	Aquæ fontanæ,	ʒij.

Piat mistura; cujus sumat coch. parv. mane ac nocte.

Or the following may be substituted :

R.	Sesqui oxyd ferri.	
	Extracti Taraxici,	aa. ʒss.
	Vini Sherii,	ʒvj.
	Tinct. Gaultheriæ,	ʒss.
	Aquæ font.	ʒiv.

M. Capiat conch. magn. bis in die.

The following is a very excellent tonic, and may be exhibited whenever any of the ferruginous preparations are indicated.

R.	Ferri Citratis,	ʒij.
	Syr. Citri. <i>vel</i> Aurantiæ.	
	Aquæ Ment. pip.,	aa. ʒij.
	Aquæ puræ.	ʒiv.

M. Exhibe cochlearium purum ter quaterve in die.

In young anæmic females, with indications of a chlorotic condition of the system; and also in children of strumous habits, the *phosphate* of iron, exhibited in combination with the sulphate of quinine, is a therapeutic agent of great value.

R.	Ferri Phosphatis,	ʒj.
	Quinine disulphatis,	gr. xii.

M. Fiant pulv. xii., quarum capiat unam bis terve in die.

A physician of great experience, and celebrated for his successful treatment of diseases of females, has employed for many years, and with much advantage, the subjoined combination of an alterative and a tonic in the management of certain forms of uterine disease.

R. Syrup. Ferri Iodidi, ℥j.
Tinct. actææ racemsoæ, ℥v.
Tinct. Rad. Aconiti, ℥iij.

Fiat mist. cujus cap. gtt. xx. ter in die.

We have seen enlargement of the os tincæ and non-malignant induration of this organ, disappear rapidly under the persevering internal administration of the above tonic; while, at the same time, the following ointment was applied once a week, by means of friction, with the finger, to the indurated os:

R. Extracti Hyoscyami.
Extracti Conii.
Extracti Belladonnæ; aa. p. e.

To each ounce of which mixture add one drachm of iodide of potassa—mix thoroughly, and apply as above.

R. Ferri Sulphatis, ℥ij.
Potassæ Iodidi, ℥iss.
Tinct. Columbæ.
Syrup Zinziberis, aa. ℥ij.

Fiat mist. capiat coch. parv. ter in die.

This mixture may be exhibited with advantage, whenever we desire to promote the absorption of glandular enlargement, and in all cases where a tonic and an alterative are indicated.

Not unfrequently the general practitioner will encounter cases of obstinate intermitten; and of uncontrollable neuralgic affections, which will resist, altogether, the effects of the ordinary antispasmodics, when singly administered. In such instances, we have often succeeded perfectly, by the combination and exhibition of a vegetable and mineral tonic,—as the following:

R. Liquor Potassæ Arsenitis, f.℥iss.
Minct. Cinchonæ, ℥iij.
Syr. Aurantiæ, ℥j.

M. Hujus mist., sumat cochl. min. bis terve in die.

During the last two years, intermitten fevers have occurred more frequently, in some parts of this city, (New York,) and in the vicinity of the city, than for many previous years. In some of these cases, where the disease has proved obstinate, not yielding to large doses of quinine, long continued, we have found it to be promptly arrested by the administration of a teaspoonful of the following mixture, twice or three times a day,—the last dose being

administered a short time before the period of the anticipated paroxysm.

R.	Quiniæ Sulph.,	ʒj.
	Liquor potassæ arsenitis,	f.ʒij.
	Acidi Sulph. Aromat.,	f.ʒj.
	Tinct. Cinch. Co.	
	Syr. Zinziberis,	aa. ʒij.

When the preparations of arsenic are employed, it is safest to give the medicine after a meal. When thus exhibited, larger, or more effectual doses may be given with more safety, than when taken fasting. Should, however, gastric irritation arise, under its use, or swelling and stiffness of the eyelids occur, the medicine should be immediately discontinued.

Should it from any cause be desirable to administer these remedies in the form of a pill, we may employ the following formula:

R.	Acidi Arseniosi,	gr. ij.
	Quiniæ disulphatis,	ʒj,
	Conserv. Rosæ,	ʒss.

Misce optime, et fiat massa, in pilulas xxx. dividenda; sumat unam bis quotidie.

We have had, recently, much experience in the use of the different preparations of Manganese, and have become fully satisfied, that this mineral tonic, in its different combinations, will prove a most valuable addition to our pharmaceutic preparations.

The presence of manganese in the blood, has been fully established by the experiments of MM. Millou, Hannon, and others; and, recently, M. Burin, in a memoir presented to the French Academy of Medicine, has given an analysis, by which he shows the amount of manganese in the blood globules, and exhibits the condition in which it exists.* It is indeed as constant an ingredient of this fluid, in its normal condition, as iron, and it is well known that a deficiency in quantity, of both these metals, may be observed in the blood in many cases of anæmia, chlorosis, tuberculosis, &c.; and hence the employment of manganese is proper, in most instances, where the administration of iron is indicated. Frequently, both may be given in combination, with great advantage.

The most important preparations of manganese, for pharmaceutical purposes, are the *phosphate*, the *malate*, and the *iodide* of manganese.

After the subjoined formula, we have administered, in tuberculosis, to a large number of patients, the phosphate of manganese, with most favorable results.

R.	Manganesii phosphatis,	ʒij.
	Tinct. Cinchonæ,	ʒij.
	Syr. Sarsæ,	ʒiv.
	Mucil. Acaciæ,	ʒj.
	Ol. Gaultheriæ,	gtt. xx.

Fiat mistura, cujus sumantur, coch. duo vel tria minima bis terve in die.

Or we may administer, under similar circumstances, and to the same amount, the manganese combined with some of the preparations of iron ; as in the following :

R. Manganesii Phospatis,	ʒiss.
Ferri Phospatis,	ʒij.
Tinct. Columbæ,	ʒij.
Syr. Tolutan,	ʒiv.
Ess. Gaultheriæ,	f.ʒj.

These mixtures should be kept in well closed bottles, and as the manganese is not altogether soluble, the medicine should be shaken before being administered.

The malate of manganese is considered by some practitioners a more eligible preparation, inasmuch as it is quite soluble, and the base of the salt is in the form of proto-oxide, the acid being easily digested.

R. Manganesii malat.,	ʒij.
Tinct. Cinch.,	ʒij.
Syr. Simp.,	ʒiv.
Ess. Limon,	f.ʒj.

Fiat mistura, date coch. parv. mane ac nocte.

The iodide of manganese is an efficient remedy in the treatment of glandular enlargements, especially those of the neck and of the spleen, in constitutional syphilis, and in the anæmia arising from scrofula and from cancerous affections.

It may be administered in the form of pills ; or, as a mixture in the following formula :

R. Manganesii Iodid.,	ʒij.
Tinct. Cardamon,	ʒj.
Syr. Sarsa,	ʒv.

Misce. Sumat coch. parv. bis terve in die.

In a paper published in a late number of the *Bulletin de Therapeutique*, M. Petriquin recommends a combination of manganese and iron, as a highly valuable agent in the treatment of disease. He has found these combined medicinal bodies, especially useful in blood diseases, such as the chloro-anæmia, after hæmorrhage, operations, metrorrhagia, &c. In the chlorosis which appears about puberty ; in that also which occurs at the critical period of women, especially when profuse hæmorrhage prevails, and in the depraved state of the blood, which succeeds intermittent fevers, M. Petriquin has found the ferro-manganese preparations of remarkable efficacy.

[From the Virginia Medical and Surgical Journal.]

The Consumption Curers of New York. By an Invalid M. D.

With regard to life it has been said by a late writer, that "we persuade ourselves that it teems with novelties and delights; that it abounds with high festival days and gala shows, somewhere in happier regions, although they come not to us." This remark is especially true with regard to the hopes and expectations of the invalid.

Art may fail him at home, measures which he must feel are well directed, may disappoint, friends may mournfully walk around him; still his mind at times overleaps all, and loves to revel in the idea that somewhere, in some unknown land, there lives the mind to conceive, and there exist the remedies which it can direct, for his recovery.

The sweet solace of the mind, Hope, as every one knows, is the constant attendant on consumption, where it is, indeed, a heavenly visitant. Wasting day by day, who has not seen the wretched victim letting go the greater hopes of yesterday, which may have pointed him to a complete recovery, but to cling the faster and with as sweet content to those of to-day, although they promise only a partial convalescence.

I cannot conceive of a more beautiful dispensation of providence than this. Round and round in a narrowing circle, day by day, but nearer the end, yet there is always hope that the last thing tried, despite of preceding failures, will prove just what is wanting. So sweet a comfort the pitying angel must send for a good purpose. But so much good comes not unmixed with evil; for this very buoyant feeling of hope is taken advantage of by designing men, whose promises to furnish remedies to suit every case, are only equalled by the extent of the popular credulity. I believe that it is in ignorance, that such deceive the afflicted. If there are any who do it knowingly, who *will* take advantage of this heaven-born feeling for the purpose of money-making; to them I have but to say with Othello:

Never pray more : abandon all remorse,

* * * * *

For nothing canst thou to damnation add,

Greater than that.

Messrs. Editors, guided by just such feelings as I have attempted to describe, I directed my footsteps to the great city of New York. I have a large cavity in the upper part of the left lung, and I had been told with a sad voice and a firm aspect, by one whom I loved and had every reason to respect, that softening had already begun in the apex of the opposite organ; and I am emaciated to

the last degree. Nevertheless, from the glowing accounts which I had heard of the wonderful power over the disease, possessed by numberless men in this great commercial emporium of our Union, I resolved to proceed thither at all hazards.

My mind was filled with vague, but most embarrassing hopes, shadowy outlines of superhuman skill, in men, high above their fellows in point of pure humanity and disinterested devotion to the science of life, flitted before my morbid vision, giving me strength to endure the journey.

Two great parties I found engaged with equal zeal in this important work. The one I shall describe as the constitutional class, or those who adopt a general treatment; the other the local, or those who adopt a strictly topical method of cure. I had been educated in the former school, and did not tarry long with its professors.

Improve the nutrition,—cod liver oil—good diet—much out door exercise,—measures which I knew had saved me so far, were all they could tell me about, but knowing all this before, I was not satisfied, and wished to go farther; for these I found were not the men who were doing so many wonders. I diverged a little into the intermediate class—a sort of divining doctor, by spiritual agency—who had an immense run, as I learned, among the clergy. The Dr. was overrun with patients—his ante-room was like the lobby of a theatre on the night of a popular actor's benefit.

I took my seat, and abiding my turn, it came at last. I found behind the scenes, one having the air of "a most prosperous gentleman," who looked through my case with an imposing flourish—smiled approvingly—received a fee,—I thought an enormous one—and bade me follow him and I would be well. Conducting me back into the ante-room, he sang out some words in an unknown tongue to a clerk near the window, who wore a remarkably stiff standing shirt collar, and then, with a graceful wave of the hand, withdrew. This latter person at once handed me a package of medicine, already neatly put up in a handsome paper box. Ah, said I in surprise, did you have it ready? Yes, said the clerk, carelessly, I saw you come in, and whilst you were waiting to see the Boss, I put it up. Then rejoined I with warmth, you knew beforehand what he meant to give me?

The clerk with a stiff standing collar, thrust his tongue into his left cheek, drew the lower lid of his right eye grimly down, with his ring finger, leered at me significantly, but with much good nature, and I departed, I trust a wiser man.

After visiting a man who had told me that he had enjoyed the honor (hitherto unknown to Americans) of being the physician for many years to her majesty, Victoria, queen of England, and that he had a book which he sold for 12½ cents, which would tell me how to cure myself of my disease as well as he could; and which I did not buy for reasons which must be obvious; I became disgusted.

with this whole class, and having no other alternative, threw myself into the arms of a Topical party, with hope still undiminished.

But in this there was some difficulty, for I found two parties, and which to select perplexed me some. The one I shall characterize as the *Probangers*, the other the *Inhalers*. From what I learned, the history of these parties is possessed of no little interest.

It appears that the Probang, and its accompanying sponge and caustic, were not originally used to cure consumption. In simple throat affections, however, it had had an immense run. Clergymen every where had tried it, and such of their flocks as they could influence had followed suit, and the whole thing became rapidly much in vogue.

Finding how easily it went down the throats of the people, it bye and bye took a bolder stand, and stoutly proclaimed its power to cure consumption, in its most common form. Still, it must be remembered, in all this time it never claimed to go beyond the bifurcation. But we all remember how popular it was, and what vast sums of money it must have made.

Whether it was the latter, which is a great stimulus to invention, or some higher motive, it is certain that this thing did not pass unnoticed. Active minds were at work, and vigorous intellects became engaged in tapping this rich mine, and in pushing farther the investigation. As the result of all this, inhalation turned up. The probangers were taken on their own ground—the people were told that if topical treatment, so partially applied, was successful, how much more were they entitled to expect from a method making the whole lung accessible to medical agents. The reasoning was plausible—the thing took—Probangdom tottered to its very base, and inhalation became the rage.

But our friends were not to be put down in this manner; they were penetrating men, and at once saw that all they had to do was to go a little deeper. The old idea of the bifurcation, being the limit of the probang, was therefore abandoned, and it was proclaimed that cavities could be invaded and sponged out, and that inhalation could not dare do more than it.

This was the state of things at the time of my visit, and it was this which led to my perplexity already spoken of.

But as I had already (as every body else almost have done in my situation) used the probang, as far as the bifurcation, as it was said to have been applied, I at length decided upon inhalation, and repaired without delay to its head quarters in the city. The Doctor received and examined my case with exceeding care. At home, my medical friends could perceive at a glance, as they told me, by the flattening of the left side of the chest, and by its quiescence during respiration, the nature of my disease, but these signs were not sufficient for my new adviser.

He stripped me to the skin, measured, percussed and auscultated,

over and over again every part. I never saw so much pains, and would have thought some of his manipulations indicative of decided "greenness," but for the exalted reputation and obviously large experience of the operator. He found my case a very beautiful one—I was, he said, just enough diseased to test the full power of his method. In the course of his remarks, however, it turned up that this person was not the genuine man so widely known, and I dressed myself with some show of indignation. He took my complaints very quietly, and showed me into the next room. The person who there received me won my heart. He showed me around, examined my case, predicted "a good time coming" for me soon, but in the midst of it all, announced himself as only an assistant, and appeared greatly surprised that I should think any thing of that. I stamped in rage, and announced that I had come all the way from Virginia just to see the genuine article, and would not be satisfied with any substitute. This gained me admission into the great man's presence. I found him superb. My account of my reception amused him much, and we became unreserved and quite intimate.

The fact was, he told me, that these fellows had come well recommended to him,—the business had prospered in their hands—he was no judge of qualification—didn't pretend to it—had seen an opening for it, had got the business up, and managed only the advertising and money department. In short, said he, I am only the capitalist of the concern. The little fellow you first saw, he furthermore proceeded, is I think myself, a little too fussy over the chest, but the other one, I do think, is *nice* for the throat.

I had one other chance, which was to have my cavity sponged out. The Doctor told me my case was a beautiful one for the treatment. I admired his ingenious arguments in favor of his method, and was quite carried away by his charming description of the *rationale* of the whole operation. When he finished, I announced, with enthusiasm, that I was a convert to his views, and pronounced myself ready at any moment for the operation. He examined me again with greater care, and with a faint touch more of gravity in his countenance. It was just the thing for my case, said he, and would have to be done, but not then. You get back home, he proceeded, and *get a little more strength*, and then return, and I'll perform the operation for you.

One hour afterwards, feeling as a doomed man, I left the great city of New York. The consumption curers have taken from me all my bright hopes, and left me but a mockery.

On the use of India Rubber as Adhesive Plaster.

MR. EYRE, in a communication to the London Lancet, makes the following observation respecting this subject.

If liquid India-rubber, spread upon calico, or other material, by a stiff brush, or by a knife, be used as adhesive plaster, it will be found to answer far better, in almost every case, than any other adhesive material, as it sticks firmly, is pliant, produces no irritation to the skin, and will bear lotions, or washing over it. It is also most valuable in cases where the skin requires a soft plaster of an unirritating nature for its defence, as in old persons, or others long confined to bed. In such cases it is better to use either soft leather or the vulcanized India-rubber, made in thin sheets; the latter, from its elasticity, is often the best, as it stretches with the skin on every movement of the body. To many kinds of wounds, from operations or otherwise, strips of thin vulcanized India-rubber, spread with the liquid, will be found invaluable as elastic adhesive plasters, as they become firmly attached to the skin, and give away to all its movements. But should any wounded part require a portion of the plaster to be non-elastic, as in case of operation for hare-lip, &c., then, in order to secure such part from being stretched, a short piece of calico, about an inch in length, should be stuck upon the middle of the elastic plaster, by which means that portion would become stationary.

If a circular piece of thin vulcanized India-rubber, about two inches in diameter, be spread with the liquid, and applied on the abdomen of an infant having umbilical hernia, and a common bandage, such as is generally used for infants, be passed lightly around the body, the protrusion will be instantly checked; and if the same plaster be again spread and re-applied, when it comes off from time to time, no trouble will be experienced by the infant. It is not necessary to use any pad or compress.

The liquid, which is like thick treacle, and the vulcanized India-rubber, may be procured in most large towns. (They are manufactured in Manchester by Charles Mackintosh & Co.) In most cases, the thin sheet of the vulcanized India-rubber, or that sold as No. 50, will be the most suitable; in other cases, the thicker, or the No. 36, will be advisable.

The most convenient method of carrying the liquid, is in one of the small, compressible bottles, used by painters, holding about an ounce, so that, on removing the screw-cap, any required quantity can be squeezed out.

The above statement will give a general idea of the subject; the materials may of course be used in a vast variety of forms.

The Practical Value of Theoretical Science: Alcohol from Coal-Gas.

For many, many years, the gas was the sole, or almost the sole valuable product of the distillation of coal. With the exception of the tar and coke, the other products were not merely suffered to run to waste, but to get rid of them was a continuous trouble and expense to the manufacturer. All this is now changing—we had almost said changed—for now-a-days the secondary products of gas making are almost equal to the gas itself in importance and value—nay, to such an extent is this the case, that manufactories already exist, not only for distilling pit-coal for the procuring of gas, but for the special purpose of obtaining these secondary products, the most important of which (under the name of *parraffine oil*) is largely consumed, both as a lubricator and illuminator. These secondary products, which may already be mentioned by dozens, are each of them of importance in agriculture, in the arts, or in the ordinary purposes of life. Many of them we owe to the chemist, working not for a practical end, but simply for the advancement of science—seeking knowledge in full faith and assurance that the knowledge thus sought and gained will in good time bring forth results important in their economical relations to his fellow men.

Such have been the minor triumphs of the chemist, when working on coal and its products; but to-day we have to announce a far greater triumph—one long looked for and foreseen—though it was not perceived from what quarter this grand confirmation and crowning proof of the truth of the general doctrines of organic chemistry was to spring.

True and rational theory has long shown us that radicals existed, formed of carbon and hydrogen, in definite series; and analysis has succeeded very lately in isolating many of these radicals; but hitherto their sources have all been indirect, as from the distillation of wood, fermentation, &c.; and we have waited and hoped till the time should come when synthesis should build up and create what analysis had been only able to dissect, and to show must exist.

This great discovery of M. Bertholot (which we find reported *in extenso* in the *Chemical Gazette* for Feb. 15th) forms an epoch in the progress of chemical science, whence we may date another start forwards. This is the conversion of bicarburetted hydrogen gas into alcohol; or, in other words, the forcing water to combine with coal-gas to make spirit of wine. It appears that, when this bicarburetted hydrogen gas, (conveniently known as *olefiant gas*, and to the presence of which in coal-gas its illuminating powers are chiefly due,) is violently shaken with sulphuric acid and metallic mercury for a long time, the gas is absorbed; and, on adding a little water, and distilling the mixture, alcohol is obtained, which, on examination, proves to be true ethylic alcohol, or spirit of wine. The olefi-

ant gas was prepared in various ways, but its source mattered not ; whatever its origin, it produced alcohol, ether, and all the various salts of *ethyl*. For complete details of the discovery, we must refer to the memoir itself.

Vast as the practical results of this discovery may prove, its theoretical and moral value are to our minds immeasurably superior. It adds another leaf to the chaplet of inductive science. It is evidently from a thorough acquaintance with, and from pondering on the abstract laws of chemical science, that Mr. Bertholot has arrived at this discovery. It bears its own internal evidence that it is no chance-medley invention, but that it is due immediately and directly to theoretical considerations alone ; and we doubt not that in this discovery we shall find hereafter another instance of the truth of Playfair's maxim, that "It is abstract, and not practical science, that is the life and soul of industry."—*Association Med. Journal*, March 2, 1855.

[From the Medical News and Library.]

Injection into the Bronchial Tubes, and into Tubercular Cavities, of Solution of Nitrate of Silver.

Dr. Horace Green presented to the New York Academy of Medicine, in December last, a communication in which he claimed to have treated bronchial affections and tuberculosis with advantage, by the direct introduction into the lungs of a strong solution of nitrate of silver, injected through an elastic tube. The subject was referred to a committee, to investigate and report on the subject.

At the meeting of the Academy, on Wednesday, June 6th, Dr. Willard Parker, the eminent Professor of Surgery in the College of Physicians and Surgeons, who was chairman of the committee, made a report on behalf of the majority of that committee. We take the following summary of the report from the *New York Daily Times*, of June 11th.

Dr. Parker stated that the committee had held five meetings—two at the office of Dr. Green, three at Bellevue hospital, and had experimented upon thirty-eight individuals, and would now present, 1. A history of catheterism of the air-passages ; 2. The results of their experiments ; and 3. The opinions founded upon these experiments.

1. Catheterization of the air-passages is no new idea : it is recommended by Hippocrates ; and Ryland, in his work on *Diseases of the Larynx*, devotes a short chapter to it.

2. The result of their experimentation proved, to the satisfaction of the whole committee, that the operation is possible. In eleven cases the instrument entered without doubt into the trachea.

This was evident to the finger of the operator, by local examination. Moreover the symptoms manifested by the patient are unequivocal. They are such as always accompany the entrance and presence of a foreign body in the air-passages, spasm, suffusion of the eyes, redness of face, a sense of suffocation, and a desire to withdraw the instrument.

In most instances the instrument passed into the œsophagus, and the report next gave a tabular statement of unequivocal rational signs by which it might be determined into which passage the instrument was passed. [This tabular statement is very incomplete.]

When the instrument is passed into the trachea, the face becomes turgid, respiration croupy, there is a spasmodic cough, and a sense of immediate impending suffocation. If assured that there be no danger, (in one instance seen,) the patient can be enabled to bear the instrument for a short period.

When the instrument enters the œsophagus, there is a hoarse, stridulous voice, retching, and cough, generally vomiting; but after a short interval these symptoms pass away; the irritation is allayed, and the voice becomes nearly natural. In but one case were these peculiarities absent, and in that, sensibility of the parts was deadened by previous syphilitic disease.

As a rule the rational signs will distinguish the location of the instrument. The blowing out of a candle by expiration through the tube, and the inflation of a bladder tied over the end, are not sound tests, as this might be done by the emission of gas from the stomach, when the tube was purposely passed into the œsophagus.

The opinion of the operator is unreliable when based upon his own opinion, without reference to these rational signs; Dr. Green being himself repeatedly mistaken, as confessed by him.

The sensations of patients are often reliable after many applications have taught the different feelings.

The facility of the operation does not depend upon the previous preparation of the patient, as insisted upon by Dr. Green, for, with the exception of Wetmore, patients who had frequent applications of the caustic to the fauces for six months, were equally intolerant as the new patients.

Much depends upon the character and form of the instruments. With a tube curved by a stylet to a form corresponding to a circle of six inches diameter, in thirteen cases five failed, or 38 per cent. of failure, which proves that the trachea may be entered with a very considerable certainty.

With a tube with a small curve, such as used by Dr. Green, in 38 cases 35 failed, or 92 per cent. of failure.

With the sponge probang, in 18 cases there were 18 failures, or 100 per cent. of failure.

The conclusion is, that the sponge probang, or slightly curved tube, cannot be made to enter the trachea, but, if largely curved, can; that local application within the trachea is difficult, and rarely

successful ; and whether an instrument may be passed at will into the right or left bronchi, the committee leave for the Academy to decide from these facts.

The committee considered themselves excused from entering into the therapeutical value of the application, as proposed, on the grounds that they do not think it advisable to discuss a mere theoretical question. A post-mortem of a consumptive is given, where death followed in twenty-six hours after the operation.

This report was signed by Drs. Parker, I. Wood, and H. O. Stone. Dr. A. H. Stevens is absent from the city, and two other members reported to concur in it, but they were absent and their names were not appended.

Prof. Baker, the colleague of Dr. Green in the New York Medical College, made a minority report, stating the reasons why he could not sign the majority report.

At an adjourned meeting of the academy, on the following Wednesday, the reports were again read, and after some debate the reports and the paper of Dr. Green were ordered to the committee on publication, to be printed in the Transactions of the Academy, and distributed to the members previous to the next meeting.

On Preserved Meat-Juice. By DR. ROBERT CHRISTISON, Professor of Materia Medica in the University of Edinburgh.

About eighteen months ago, when consulted in the case of a relative of Mr. Gillon, the extensive and skillful manufacturer of preserved meats at Leith, I found that the patient was entirely supported, in a severe illness, by the preserved juice of meat, which had been given at Mr. Gillon's suggestion. Observing the readiness with which it was taken when other food of every kind was refused, I was induced to try it in other instances, and eventually to employ it in various states of disease. The results led me to suggest the use of it to many professional friends, and to advise the druggists of Edinburgh to keep it ; so that it is now much in request, and may be easily obtained.

This substance is the pure juice of beef, preserved in the way in which meats and vegetables are now so extensively preserved in the fresh state, for store provisions. The mode of preparation is as follows: Cylindrical cases of tinned iron are filled each with six pounds and a half of beef ; and the lid is soldered on, but with a hole about half an inch in diameter in the middle of it. Two trays of such cases are shoved into iron retorts, analogous in form to retorts for gas-making, but double-cased, so that steam may be introduced into the interstice around. They are thus subjected to a heat of 220 ° under steam pressure, for about three hours, by

which the beef is partially cooked, and, being thus also made to contract strongly on itself, squeezes out a portion of its juice, amounting to a few ounces from each tin. The tins are then drawn, the juice is poured out, and the meat, with certain additions, is subjected to the preservative process. The juice, after being cooled, and entirely freed from fat, is put into small four-ounce tin cases. Each of these has a small aperture at one end, which is secured with solder, after the juice is poured in. The tins are then subjected, on trays, to a temperature of 220° in a muriate of lime bath. On being removed, the solderer rapidly touches with his iron the solder on the top, which giving way allows steam to rush out forcibly and carry with it the air in the upper part of the interior. By the time he has thus swiftly passed over sixteen or twenty tins, the first is ready for being well-soldered by a similar dexterous application of his iron, which then in succession as quickly secures the whole open and steaming apertures. The process of heating in the bath, tapping, and re-soldering, is then repeated a second time, to make sure of the thorough expulsion of every particle of air. The tins finally are painted to preserve them against rust.

The process is most perfect. I have repeatedly opened tins eighteen months in my possession, and stated to have been many months in store when I got them, and in every instance the contents had the rich delicate aroma and taste of fresh beef-juice. Sometimes the taste is slightly resinous or soapy, in consequence of a little resin having obtained admission in the operation of soldering. But as this does not occur often, the impurity may be avoided with due care. The juice may be taken with relish in small quantity, either cold or warm, in its concentrated shape; but it is rather strong to be used without dilution. When diluted with three times its volume of boiling water, and duly seasoned with salt and pepper, it makes a more palatable beef-tea than any which can be made in the usual way. Sometimes, indeed, a patient will be found to prefer the ordinary sort, either because the preserved juice has unluckily been resinous, or on the principle that leads some people from the plains of England to prefer hard water to the pure mountain springs of the primitive districts of Scotland, viz., because they are not accustomed to the finer sort. But this is not the general fact; and there can be no doubt that the preserved meat-juice makes a most palatable beef-tea, and an equally eligible basis for many soups.

Until about ten years ago, in concurrence with general opinion, I used to regard beef-tea as a highly nutritive article, not to be rashly or freely given during disease. My sentiments in this respect were shaken, when I ascertained, in the course of some experiments for adjusting the dietaries of the General Prison and the Royal Infirmary, that a pint of the very finest beef-tea contained scarcely a quarter of an ounce of anything but water. Since that

time I have much more readily listened to the cravings of patients for beef-tea in even many acute diseases, and above all in protracted subacute diseases, and in chronic diseases with fever; and I have thought I saw that it maintains the strength almost like wine, lessens emaciation and weakness in tedious diseases, and does not occasion any increase of reaction. There is no disease in which these properties are more remarkably shown than in protracted cases of gastric fever, of which, by the way, I have seen an unusual number both in town and country during the last three years. These cases have often lasted for six weeks, or—with a relapse, from too early indulgence or exposure,—for the long term of three months nearly; during which little, or absolutely nothing else, was taken, except beef-tea or diluted meat-juice; and without the attenuation and debility which so protracted a fever and want of appetite ought to have induced. In some instances I could scarcely doubt that life was preserved by this nutriment. It is unnecessary to particularise the various states of disease in which the same practice has been followed. It is peculiarly applicable to all subacute protracted diseases, whether febrile or otherwise; and in all such there is even no great reason to hesitate in resorting to it when local inflammation is present. Every one, I think, will be struck with the readiness with which such patients will often take diluted meat-juice or beef-tea repeatedly when they refuse all other kinds of food. It should be given in the quantity of a teacupful at a time, every four or six hours; but it is well to alternate it with some other simple nourishment, when the patient will consent to do so.

What is its mode of action? Not simply nutrient. A quarter of an ounce of the most nutritive material cannot nearly replace the daily wear and tear of the tissues in any circumstances. Possibly it belongs to a new denomination of remedies, whose action never was even suspected to exist until recently—those which, by some peculiar influence, diminish the waste of the tissues under the exercise of their functions. Professor Lehmann has proved [*Annalen de Chemie*, 1853,] that coffee possesses this singular property in so remarkable a degree, that in persons following an active occupation, an infusion of an ounce of roasted coffee daily will reduce the daily waste by a fourth part; and the same property seems likewise to belong to tea, and other restorative beverages. It is not improbable that the sapid and saline principles of meat, united in what is called ozmazome, and constituting the ingredients of beef-tea, and meat-juice, possess some such property. It is difficult otherwise to account for the interesting results obtained by the late Dr. Edwards in 1833, who, in his researches on nutrition,—strangely overlooked by the celebrated Gelatin Commission of the French Institute, in their condemnatory report on gelatin in 1841,—found that dogs die slowly if fed on bread and gelatin alone, but, when thus greatly reduced, quickly regain flesh and strength by the ad-

dition of two ounces of meat-tea, which cannot appreciably increase their textures by its own insignificant amount of solids. Either it acts as a digestive ferment, so to speak—promoting the assimilation of other nutriment—or, like coffee, it must lessen the waste of the tissues in the exercise of their functions.

Mr. Gillon's meat-juice contains only $6\frac{1}{2}$ per cent. of solids. As a mere nutrient, therefore, it is much in the same category with beef-tea. Sixteen ounces of beef-tea, made with the contents of one tin, yield only 114 grains of solid extract. It contains no fibrin, no albumen, no gelatin. It does not even gelatinize on exposure to the air for days; it is ozmazome, with the salts and sapid and odorous principles of meat, and materially different from all boiled extracts.

I should add, that no good beef-tea can be made so cheap as with this preserved meat-juice. A tin of four ounces makes sixteen of strong beef-tea. This much requires, in the ordinary way, a pound of the finest beef, which at present costs ninepence, and is scarcely ever so cheap as sixpence. The reason for the cheapness of Mr. Gillon's meat-juice is, that the residual meat is economised, while that of the ordinary process is good for nothing.

It is a much more convenient article for use than any of the extracts made from meat by extemporaneous processes in the kitchen, or by certain very dubious chemical methods lately come into vogue. It differs materially from all meat-extracts prepared by boiling.—*Monthly Journal of Medicine, Jan., 1855, p. 6.*

EDITORIAL.

Healthy Skin: A Popular Treatise on the Skin and Hair, their Preservation and Management. By ERASMUS WILSON, F. R. S., author of "A Treatise on Diseases of the Skin," "A System of Human Anatomy," &c. &c. Second American, from the fourth and Revised London Edition—with illustrations. Philadelphia: Blanchard & Lea. 1854.

This excellent little work, of 291 pages, needs no particular description or commendation from us, as the former edition must have made it familiar to most of the Profession; besides, the superior

ability and high reputation of the author is a guarantee for anything that may issue from his pen, especially upon the subject of the skin.

The purpose of the work, as stated by the author, is two-fold; "to supply a knowledge of that part of the economy of man which forms the exterior of his body, and is more immediately under his own personal control, viz: the *skin*, the *nails*, and the *hair*; and to suggest reasons for the devotion of a certain amount of care and attention to its management."

The subject is certainly replete with interest, both as illustrating the beauty and contrivances of Nature's works, and as supplying important suggestions which may be turned to practical account in the preservation of health. Much has been written and said of late upon the important influence of a proper condition of the skin upon health and morals, and too much cannot well be said. But at the same time, since Hydropathy has made so much noise, some credulously suppose that the proper condition of the skin consists in its semi-perpetual submersion and soaking, and that the portion of the time it is not in *soak*, it should be *rubbed*; and a certain class of popular, but quackish works, favor these extravagant notions. Such works as this of Wilson's are the best correctives on the one hand of the neglect of the skin, and on the other of its over treatment.

The volume before us is got up in good style, and is well illustrated; and makes a very readable book both for professional and non-professional persons.

A Universal Formulary: Containing the Methods of preparing and administering Official and other Medicines. The whole adapted to Physicians and Pharmacutists. By R. EGLESFELD GRIFFITH, M. D. A new edition, carefully revised and much extended, by ROBERT P. THOMAS, M. D. With illustrations. Philadelphia: Blanchard & Lea. 1854.

This fine volume of 651 pages is very welcome to our table, containing as it does an immense number of formulas culled from a great variety of sources. Not only have the Pharmacopeas, Dis-

pensatories, and other standard works contributed to it, but more obscure authors and the Journals as well. Besides the formulæ and descriptions of pharmaceutical processes, the work contains an introduction of some sixty pages devoted to subjects of much interest, such as Weights and Measures, specific gravity, Temperatures for certain Pharmaceutical Operations, Hydrometric Equivalents, Explanations of Principal Abbreviations used in Formulæ, Vocabulary of Words employed in Prescriptions, Observations on the Management of the Sick Room, Furniture, &c., Administration of Medicines, Doses, Enemata, Suppositories, Management of Convalescence and Relapse, &c. &c.

The Universal Formulary of Medicines and Dietetic Preparations occupies from the 75th to the 492d page, when comes a list of Incompatibles, a Posological Table of the most important Medicines, a Table of Pharmaceutical Names which differ in the United States and British Pharmacopœias—then Official Preparations and Directions of Internal and External Remedies, of Blood-Letting, &c. A chapter on Poisons and Antidotes, and then come what is very important in all works of this kind—copious indexes. An Index of Diseases and their Remedies, an Index of Pharmaceutical and Botanical names, and a General Index. This account of the contents of the work will give a clearer idea of it than any description we can give; and when we say that the whole work is prepared with great care, and in a highly commendable manner, we have said sufficient to introduce it to the favorable consideration of our readers, which we most cheerfully do.

Transactions of the Medical Association of Alabama.

This is a pamphlet of 148 pages, and is the report of the proceedings of the eighth annual meeting held at Mobile in February last. The Association consists of about 150 members, and their Transactions are of a creditable order. It appears from the reports, that the Negro mortality in Mobile is far less than that of the whites, owing to their being better adapted to the climate. Dr. Nott's report affirms that the climate is nevertheless favorable for surgical operations, the success in this department far exceeding that of other regions.

Rush Medical College, of Chicago.

Prof. Herrick, of this Institution, has been transferred from the Chair of Anatomy to that of Physiology and Pathology, and Dr. J. W. Freer has been appointed to the Chair of Anatomy. Prof. McLean, having resigned the Chair of Materia Medica, Dr. H. A. Johnson, of Chicago, is appointed in his place, and Prof. E. Andrews, of the University of Michigan, has received the appointment of Lecturer on Comparative, and Demonstrator of Human Anatomy.

We see by the North-Western Medical Journal, that the old college building has been taken down, and a new one is being erected, with many improvements.

Dowler on Animal Heat.

We re-publish this article, not endorsing its doctrines, but to acquaint our readers with what is said on that side of the subject. Dr. Dowler is the gentleman who was extensively engaged with Dr. Cartwright in vivisection upon the alligator.

MISCELLANEOUS.

Have we too many Physicians among us?—The *Montreal Medical Chronicle* distresses its soul over the fact that the schools in the United States have graduated about 1400 Physicians this year, and wonders what such an amazing supply will do for a living. The population of the United States is over 23,000,000. One Physician is required on the average to about every 700 inhabitants. This gives over 30,000 Physicians required in the nation. It is probable that the average life of a Physician is not over 30

years after he enters his profession. Hence it follows by computation that the waste by deaths alone is 1000 Physicians a year. Now add to this another item. In all the huge west where everything is on the changing system, more Physicians are lost by change of business than by death. Some grow weary of the severity of the labor, some fail in health, some grow rich and lazy, and many are drawn away by speculation, and the attraction of other business; hence it happens that there is more diminution of the professional ranks from these causes than from death. In the older parts of the country however this is not so much the case, but on the whole it can be no exaggeration to put down this loss as 300. We have, therefore, an actual loss of 1300 Physicians annually, which must be made up. Again the increase of population in the United States is about 700,000 a year which requires an increase of a round 1000 Physicians to supply it. The demands therefore of the population are as follows:

For vacancies by death, - - - - -	1000.
“ “ “ leaving profession, - - - - -	300.
“ supplying increase of population, - - - - -	1000.
	<hr/>
Total, - - - - -	2300.

There are actually required therefore *twenty-three hundred* new Physicians in the United States every year.

To meet this we have only 1400 graduates of the schools, and perhaps 300 German, English and Canadian M. D's, who come in from abroad, making in all 1700, and leaving an actual deficiency of 600 a year. Whence is this made up? Simply by semi-regulars who never graduate, and by quacks. The catalogues of the schools show constantly a very large preponderance of the Junior over the Senior classes, showing that multitudes take one course of lectures, who never return to graduate. Such is the constant call for Physicians at the west, that many of these half fledged students, after taking one course of lectures, rush into practice, and by much experiment on human life, become at length pretty good Physicians, without ever graduating. The laws of very few of the States, offer any serious obstacle to this wholesale sacrifice of human life to ignorance. This is the source which supplies the 600 lacking Doctors. So far therefore from our schools overstocking the country, they have never come within hundreds of supplying

its wants. There are whole regions where not one quarter of the regular orthodox practitioners have diplomas.

A Plan for the Radical Cure of Some Cases of Inguinal Hernia. By Patrick H. Cabell, M. D., of Selma, Alabama.

Of the different means by which it has been proposed to solve that difficult surgical problem—the cure of reducible inguinal hernia, none appears more rational nor offers fairer chances of success than Dr. Gerdy's method of invaginating a fold of skin into the inguinal canal. The principle of this operation is certainly correct. It aims at obstructing the abdominal ring, the insufficiency of those operations which simply produce adhesions in the sac having long since been tested; the only difficulty is in the execution.

I wish to describe a form of truss which I think calculated to obliterate the inguinal opening in ordinary cases of oblique hernia.

In place of a pad, the inguinal branch of the ordinary truss is made longer than usual, and to its extremity is attached a rounded cylinder of soft wood designed to be inserted into a canal, pushing a fold of the skin of the scrotum before it. This finger-like projection of wood is kept up by the pressure of the spring, the displacement is prevented by the circular strap and thigh strap.

When the pouch of skin seems to have adhered in its new situation, the surface of the "cul-de-sac" is to be denuded of its epithelium, and then its sides brought together by an ordinary truss with a long pad resting over the invaginated portion.

I do not claim any thing new in this method, and am far from vaunting it very highly, for the cases in which I have used it have not been long enough under treatment to enable me to decide on the permanency of the cure, but I think it cannot be unsafe, and it is free from some of the objections of the ordinary methods, as the patient can walk about during the treatment.

I propose it, then, with much diffidence, hoping that it will be tried by surgeons if they have nothing better.—*Virginia Medical and Surgical Journal.*

American Association for the Advancement of Science.—The ninth meeting of this Association will be held at PROVIDENCE, R. I., commencing on *Wednesday, August 15, 1855*, and will continue probably for one week.

Calculus adherent to Bladder by means of a Needle.—By J. SIMON, Esq.—Mr. Simon, a few days ago, performed the operation of lithotomy on a boy about six years old. After removing the calculus, he felt something in the bladder, which, on removal, proved to be the head half of a needle. The other part of the needle was found in the calculus. Mr. Simon supposed that the needle had been introduced from the rectum, and that the portion which projected into the bladder had served as a nucleus for the calculus. *Association Medical Journal, 1855,*

Judicial Decision in Antwerp respecting Medical Secrecy.—The Lower Court of Antwerp has just decided that a medical man who registers a child whose mother he has attended in labor, is not bound to divulge the name of the latter, if he have made a promise to keep the secret. The question and the trial had caused much sensation among our Belgian brethren, and we are happy to state that a large number of them joined in a subscription to support Dr. Bessens, who refused to give the name of the mother in a case of the description mentioned above. The privilege thus conceded is honorable to our profession, and would have the tendency, were it generally granted, to diminish the cases of infanticide.—*Lancet*, May 26, 1855.

Treatment of Gonorrhœa.—Messrs. Editors—Two very aggravated cases of gonorrhœa have recently been cured, under my observation, by the simple injection of a saturated solution of common alum up the urethra, by a common penis syringe. The application was made morning, noon and night. The offending organ was bathed frequently during the day in ice-water; and its painful turgescence at night was subdued by wrapping it in a cotton cloth dipped in ice-water, and renewed when it became warm. The diet was light, and chiefly of vegetables. Cold water was drunk very copiously during the day, and produced a free flow of urine.

The cure was effected, in both cases, in from two to three weeks.

This treatment is so much simpler, and cheaper and more agreeable than the ordinary one, that I cannot help recommending it, as an experiment, to the faculty and to the afflicted.—*Stethoscope*.

PHILO-MEDICUS.

The Ether Case at Lynn.—At the coroner's examination in the case of the death of Mrs. Mary Farley, of Lynn, caused by chloric ether administered by Dr. Davis, a dentist, it was shown that Mrs. Farley had urged and persuaded the doctor, against his expressed wishes, to administer ether to her while he removed a tooth. Dr. Davis gave her one-and-a-half ounces of ether, which was less than the usual amount. She exhibited no unusual symptoms until he attempted to open her mouth, when he discovered that her jaw was fixed. He immediately threw water upon her, fanned her, and resorted to every method to restore her to consciousness; but she died in about seven or eight minutes. The coroner's jury returned a verdict that "her death was caused by a congestion of the lungs, consequent upon the inhalation of ether administered by Addison Davis. In returning their verdict, the jury wish to express their sense of approval of the course adopted by Dr. Davis in using every precautionary measure."—*Boston Med. & Surg. Journal*.

Equal parts of collodion, and per-chloride of iron,—collodion, Venice turpentine and castor oil, as impenetrable coverings for the cure of local inflammation, are spoken about.

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NO. III.

ORIGINAL COMMUNICATIONS.

ART. I.—*Strangulated Hernia: Two cases reported by E. ANDREWS, M. D.*

On New Years evening, 1854, I was called to go to the town of Northfield, to see a case of strangulated hernia, under the charge of Dr. D. On arrival, the patient was found to be a man about 60 years of age, good constitution, and not much enfeebled by his age. The hernia had been strangulated some thirty hours, and the attending physician had used all the usual means of reduction, without success. The hernia was scrotal, and the tumor inflamed, and sore. After examination, myself and Dr. D. put the patient under the influence of chloroform, which somewhat relaxed the hardness of the tumor. We then made persevering efforts to reduce it by taxis, and position, but without success. The muscular relaxation, however, was so complete, that we were satisfied that chloroform might be used to admirable advantage in reducible hernia. Not being able to return the gut by taxis, I proceeded to cut down upon it. I found the sack distended, with bloody serum, a large clot of blood in the bottom, from the ruptured mesenteric vessels, and the intestine unusually black, but not gangrenous. There were also plastic effusion, and fresh inflammatory adhesions to the inner sur-

face of the sac going on. I divided the stricture which was at the external ring, (the hernia was straight, the internal ring being dragged nearly opposite the external,) tore up the new adhesions of the intestine carefully with my finger, and returned it. I also did what perhaps is not recommended by the books, and perhaps not *recommended*. The sac itself lying pretty loose in the scrotum, I dissected it up from its areolar attachments below, and piled it up in a little heap against the external ring, thinking that it might in that shape form a better barrier against future descents, than if I left it in its original position, with only its inflammatory adhesions in the way. As it proved however, the neck of the sac did not afford sufficient basis to nourish the part which was raised from its areolar attachments, and the whole of it, (as I conclude by Dr. D.'s subsequent report,) sloughed and came away during the cure. The man, as I am informed, recovered well, and is free from further trouble.

CASE 2*d*.—On the 6th of May, 1855, I was called upon by Prof. S. to operate on a case of irreducible hernia under his care. The patient was a German boy about 15 years old, but very backward in development, the signs of puberty being entirely absent. No clear account of the history of his trouble could be obtained from him—not even any certain information whether he had a hernia or not. He said that one of his testicles was always larger than the other, and that was all he had noticed. The case was obscure. The symptoms of strangulation were not fully developed. The constipation was perfect, but there was no vomiting. The tumor in the scrotum was small, circumscribed, and very hard, and it was difficult to isolate any thing like a testis from it. There was also considerable inflammation and soreness, and the skin was decidedly red. On the whole, there seemed to be reason to suspect that it might possibly be a case of orchitis, with the inflammation extending to the cord. We decided to try another cathartic, to test the question, and accordingly having administered a powerful purgative, sharpened with croton oil, left. The medicine produced much rumbling and griping in the bowels, but no catharsis, and after waiting twenty-four hours we examined again, and decided to operate.

The patient being placed under the influence of chloroform, I cut down upon the sac. On opening it, I found the gut stretched

tightly along a narrow canal like a round cord, seeming to be fast somewhere both above and below. I could not at first get my finger behind it, so that I began to suspect it was after all only a swollen spermatic cord. At length, however, the stricture above yielded enough to allow more intestine to be pulled down and thus slackened the tightness, when I raised out the gut and ascertained its nature. Still it was fast below in the scrotum, and could not be pulled up by any force which it was safe to use. I therefore extended the incision downwards nearer to the bottom of the scrotum, and discovered another stricture exceedingly tight, below which in a sort of bulbous enlargement, the strangulated intestine lay with the usual ecchymosed and engorged appearance. The principal difficulty indeed lay at the lower stricture, as was evident from the fact that above, between it and the upper stricture, the intestine was nearly natural in its color.

The organs were replaced without difficulty, and the patient recovered tolerably well, notwithstanding slight peritonitis radiating from the point of injury over part of the abdomen. After his recovery he was still troubled with pain and soreness in the right iliac region whenever he exerted himself much, owing as I suppose to adhesions between the intestines and the abdominal walls, which attachments were put upon the stretch by his motions.

The principal points of interest were, 1st, the slight constitutional sympathy exhibited, notwithstanding the exceeding tightness of the stricture, there being little or no vomiting, and but slight pain; and 2d, the existence of two strictures, of which the principal one was not at the inguinal ring, but some two or three inches below it, in the lower part of the scrotum. The explanation which I make of this is, that the hernia was congenital, and that the peritoneal tube after the descent of the testis in infancy, partly closed above it, not enough to form a complete and separate tunica vaginalis, but yet enough to make a narrow placé which became the seat of stricture.

ART. II.—

BERWICK, Pa., July 25th, 1855.

DEAR DOCTOR :—

It is with no slight degree of hesitancy that I venture to add one more to the already multitudinous compounds of anti-periodic remedies. The following formula I have used thus far with universal success in all cases of uncomplicated intermittents. You will see I have no new medicine to propose, but a compound which will readily suggest its own *modus operandi*.

R. Quinia Sulphas,	grs. xxx.
Acid. Sulph. Arom.	gtt. xx.
Tinct. Capsic.	f.ʒj.
Ol. Caryoph.	f.ʒj.
Ol. Terebinth,	gtt. xx
Æther Nit.	f.ʒj.
Aqua,	Ox. M.

S. One table-spoonful every four hours.

The advantages which this mixture has over those in common use may be briefly stated as follows :

1. It contains quinia enough to interrupt the paroxysms without the aid of its prophylactic adjuvants. The mixture being taken as directed, the use of the quinia is so far prolonged as to secure a tolerable immunity from future attacks.

2. The excitants, capsicum and cloves, that it contains, produce diaphoresis in the course of 24 or 36 hours, which is soon accompanied by the diuretic effect of the turpentine and ether, both of which continue as long as the medicine is taken, thus not only fortifying the system against the recurrence of the paroxysms, but eliminating the morbid matter, which perpetuates them.

3. The certainty of its action, and the protection which it affords, is certainly unequalled by any remedy or compound which I have ever used.

Of course, Doctor, I would not call this mixture *infallible*, as it would not be difficult to imagine many and diverse cases in which it would be wholly ineligible.

Hoping that your experience may amply justify the above statement, I remain

Very Sincerely Your Friend,

W. A. PECK, M. D.

ART. III.—*Dislocation of the Jaw by an Emetic: Reported by E. ANDREWS, M. D.*

In the latter part of May last, a patient called upon me to reduce a dislocation of the jaw. I found that both condyles were dislocated, the chin thrown downwards and forwards, and the mouth open, with all the other symptoms usual in such cases. The back teeth being entirely gone, I could not use them as a fulcrum to assist in the reduction, but was obliged to contend against the masseter and temporal muscles simply by the strength of my thumbs placed on the alveolar ridge. I succeeded, however, without much difficulty, in replacing the bone, and the patient recovered as usual.

On inquiry as to the manner in which the accident occurred, I learned that the person had for years been in the habit of taking a lobelia emetic at certain regular intervals of time, on which occasions a peculiar catch would sometimes be felt at the articulation of the jaw, but which had always righted itself immediately. The last emetic however, made more thorough work, and during the efforts of vomiting the jaw was thrown entirely out, leaving it in the position before described.

ART. V.—*The Elements of Instinct: A Lecture delivered before the Serapion Society of the University of Michigan, by E. ANDREWS, M. D.*

GENTLEMEN OF THE SERAPION:

The phenomena of instinct and of mind, as exhibited in the animal kingdom, have been to nearly all writers a mountain of blundering and confusion. Indeed, it is a difficult subject, for in the first place it concerns mind and the laws of mental philosophy, and in the second place the natural sciences. Now of all the persons who have sound educated minds, but very few are worth a straw when they come to reason upon the laws of mind, and of those who *are* good at it, scarcely any have either taste or talent for natural sciences. Hence very few indeed are the authors who have spoken well on this topic. Writers who have touched it have been exclusively either metaphysicians or naturalists, and have left unexplor-

ed a field which lies on the boundary half way between their respective ranges of investigation. On the other hand, the study of the Godlike mind of Man, attracts the mental philosopher away from the humble psychology of brutes, and on the other the naturalist is too much absorbed in material phenomena to study a subject which lies on the borders of metaphysics; hence both have been content to retail the opinions of their ancestors whenever they were obliged to speak of the subject, and to make over again the same blunders which have been made by each successive generation, ever since Baalam smote his ass on the supposition that she had no mind, and therefore wouldn't know when she was abused.

Furthermore, the motives of eternity have pressed upon our minds. In times when men with inverted ambition have striven to believe that the soul's immortal fires are quenched in death, there has been a natural reluctance to speak of those points wherein brutes live like men, lest it help on the disgusting conclusion that men die like brutes. From these various causes it has happened that most writers have touched the subject only incidentally, and when they *have* ventured upon it have made such wretched work that it puts a reader into intellectual distress to see how halt and lame, and blind and rheumatic and old, the arguments are.

The word "instinct," is one that is incapable of being defined in any way that will reconcile the usage of authors either with each other or with the facts of nature. In short, it has been a kind of convenient term to apply to all the acts of living beings whose nature we did not comprehend, and consequently it is given to such opposite and discordant phenomena that we know not which of them have the proper right to the title. Perhaps the most common idea among our writers is that it is some peculiar attribute different in its nature from any other faculty of body or mind, which unerringly impels the animal to certain actions without the aid of previous experience, reasoning or instruction. Webster quoting from the encyclopedia says expressly that instinct is an attribute of the mind, while others declare that it is purely a function of the body, and others still, in view of the fact that in the class of insects actions are performed with unerring skill, whose wisdom is so high that the best efforts of science are required to give us a complete idea of them, declare that God is the soul of the brute, and that instinct is his direct power, working out in them his sublime purposes. From

all these opinions one is apt to hash up in his own mind a kind of compound idea without symmetry or consistency, in which the main idea is that instinct is something mysterious and wonderful—a power superadded to the brutes unlike anything in our own nature. My plan in this discourse is to strip away the mystery from it, and show that wonderful and complex as are the effects of instinct, its elements are as familiar to us as our own daily thoughts.

Well—what is this surprising faculty whereby the bee, who has no instruction, and but little reason, yet builds its honey-comb from generation to generation in the very form which the science of mathematics pronounces best ?

In pursuing this inquiry it is important not to commence at the bee, the ant, or the beaver, but at man himself, and for these reasons : 1st. The instincts of the animals which I mentioned are exceedingly complex and powerful, and for that very reason they baffle our research, but in man they are comparatively few, simple and plain, and therefore more easily analyzed. 2d. The human instincts are more perfectly under our observation, as we can each one appeal to the infallible evidence of our consciousness for what is mental, and to our sensations for what is physical. Indeed, I venture fearlessly the assertion that all reasoning on the nature of brute instinct, which is not based on a careful and correct analysis of our own, is necessarily shallow, delusive and false. Instinct is the offspring of the sensations and emotions, and he who does not understand this part of his own nature is utterly incompetent to conceive what it *is*. To examine our own instincts is therefore the very threshold of our knowledge on this topic.

First, then, let us recal the characteristics of an instinct, that we may recognize it.

An instinctive act is one that has a definite use and object in the welfare of the individual or of the species, but the animal does not do the act for the sake of that end or object, but for the pleasure of the act itself. Thus the act of chewing food has an object, viz., the preparation of food for the stomach, to the further end that it may be well digested, and nourish the body ; but that is not the motive which induces either man or beast to do so. It is therefore an instinctive action, and like others is performed with equal skill by the learned and the ignorant, from generation to generation. Now it is conceivable that a man having learned the fact that to put food

in his mouth, masticate it, and swallow it, was necessary to strengthen his body, might apply to a physician to know what substances were nutritious, then weigh or measure out a proper quantity of rice or beef, then proceed to put it in his mouth according to rule, grind it to pieces with his teeth and swallow it, all because he judged it necessary to nourish his body. This would be an act of reason—it was in fact a similar system of eating which the Grahamites established a few years ago, and which melted away before the gradual action of natural cravings. Now let us suppose that one of the aforesaid Grahamites who had eaten according to reason a definite and stinted quantity weighed out with the scales every day, and had grown thin and pale and intellectual, should some day become so absorbed in his sublime contemplations as to forget to eat his dinner of herbs, and wander off for a time through the street. It is possible that about the time hunger began to be outrageous, he might pass the door of an eating house, and his nostrils be regaled with a fragrant odor of fresh oysters or hot venison. The nature of instinct is such that he would feel an instant desire to put some of the said fragrant articles in his mouth and swallow them, and in short, if he were not a man of firm resolution, it is probable that he would go in, call for a dish, put the food in his mouth, and regularly eat it, not only without the intention of nourishing his body, but in spite of his intellectual opinion that such food was not suitable for nourishment. This would be an instinctive act; it is performed in obedience to certain impulses or desires which spring up in the mind without the help of reason, and even in spite of its dictates. I suppose that of all the eating done upon the earth, there is not a single healthy man who takes his food with the simple view of nutrition. They eat for the pleasure of eating. In sickness, however, we often see it otherwise. The system in such case would often be injured by food, and it is wisely provided that the natural desire of it shall change to disgust. The friends knowing the usefulness of eating in general will argue strenuously with the sick man that he must eat to keep up his strength, even if he don't like it, and frequently he will do it both to his disgust and to his injury, being convinced by the arguments of his friends: this again is an act of reason in opposition to his instinct.

I might multiply illustrations from our other instincts, but one

will suffice for analysis. Now I presume that all will agree that the instinct of taking food is the same in its nature whether a man eats his viands, or an ox crops the grass, or a bee sips honey from the flower, and if we can analyze the instinct in man so as to recognize its essential elements, we shall know what those elements are wherever the instinctive desire of food exists. You see that so far from instinct being involved in inextricable mystery, we have its elements right at home in our own experience, and may examine them thoroughly, and know all about their nature. The first requisite of an instinctive act is a certain condition of the body of the animal. Thus in our illustration this condition consists in a deficiency of nutrition. Now instead of leaving this deficiency to be discovered and supplied by reason, the Almighty Architect of the animal frame has so constructed it that two separate phenomena spring up. First a painful sensation in the region of the stomach, called hunger; second, a peculiar condition of the organs of taste and smell, whereby they are rendered capable of exciting agreeable sensations by contact with nutritious substances. Thus far the changes are entirely physical, and in any other person or animal unobservable, for as yet no action has been put forth, but only the motives to action are created. The changes also are arbitrary in their order of succession. We cannot tell why the deficiency of nutritious matter in the system induces this peculiarly active state in the organs of taste and smell. All we can say is that God has so created the machinery of the body that when the former condition occurs, the latter immediately succeeds, just as the governor of a steam engine draws open the valve whenever motion diminishes. Next the mind is brought into action, and it is necessary to see in what manner. Now, gentlemen, let me caution you against being disturbed at the apparently trivial nature of this preliminary analysis. I know it seems ludicrous to make a scientific examination of so simple a thing as eating one's dinner; but I have selected it for the very reason that it is simple. If we were to commence with the powerful and complicated instincts of the ant and the bee we might flounder forever in the mire of conjecture, but if in the simpler acts of our own impulses we can ascertain what are the elements of instinct, we may then understand the nature of their more complex combinations whereby the bee builds its cell, and the beaver its house.

To return to the subject. We found the organs of smell and taste arrived at a certain condition wherein the application of nutritive substances excited agreeable sensations. Now the desire immediately springs up in the mind to enjoy that sensation to the full by placing an abundance of the article of food in the mouth. This is the first act of the series. It is an instinctive act, because it is executed not for the sake of the valuable nutrition to be obtained, but for the pleasure of the sensation of taste. I will not insist at present on any other auxiliary impulse—at all events, every one must admit that the pleasure of taste exists, and that it is designed to stimulate to the ingestion of food, and that it secures that object, and that the man or beast who puts food in his mouth in obedience to it, does it without any necessary regard to the object of nutrition. It is therefore an instinctive act.

After the food is placed in the mouth, an entirely new impulse occupies the mind, and that is to enjoy the pleasure of masticating it. I suppose that the animal nor the man goes to work to reason about it. He does not say to himself, now this morsel of food has a greater diameter than my esophagus, and therefore it must be crushed between my teeth before I can get it down; nor does he reason about the advantage of mixing it with saliva. When there is a morsel of solid food in the mouth there is an irresistible impulse to chew—for the pleasure, and not for the usefulness of it. This is the second act. It is done for the pleasure to be enjoyed in the act, and without a thought of the real use of it. It is therefore instinctive.

When the food is thoroughly reduced and mixed with saliva, the pleasure of the action of mastication ceases, and a new desire takes its place—that is, to convey it to the pharynx, in which act a positive pleasure is enjoyed entirely independent of the consideration that that is the road to the stomach. At this point instinct ceases, and reflex action commences. The action of the esophagus is almost entirely independent of the mind. Thus in eating a single mouthful of food, three separate acts of instinct are required. They follow each other in a determinate order; they accomplish a predestined end without any design on the part of the being exercising them. Finally, we find that after the stomach has received as much food as is required at the time, another change takes place. The hunger ceases, the nerves of smell and taste no longer excite pleas-

ant sensations, and the acts of mastication and swallowing cease to be agreeable. When this takes place the person ceases to eat, not generally because he concludes that there is no further nutriment needed, but simply because eating is no longer agreeable. I might go on in the same manner, and analyze all the instincts which the human being possesses, but time will not permit, nor is it necessary. I should discover in them all the same elements, and from their comparison I might deduce the following general principles:

First. Instinct implies a certain fixed and peculiar correlation between the organs of the body and some class of external objects, whereby their use transmits to the mind agreeable sensations.

Secondly. Although the use of these objects is designed by the Creator to benefit the individual or to preserve the species, yet the individual using them is moved not by that ultimate benefit, but by the desire of the present pleasure.

Thirdly. When the proper use of the objects requires a complex series of actions, the pleasurable sensations arise not all at once, but in a certain invariable order, whereby the animal is induced to perform successively all the acts necessary to obtain the pleasure. Thus the smell of a fragrant fruit is followed by the desire to taste it, the tasting is succeeded by the impulse to chew it, and when that is accomplished both are superseded by the agreeableness of swallowing.

Here in these three propositions lies the whole science of instinct. It remains now to see how they will apply to brute animals. As we go downward in the scale of being, we shall find instinct to increase in complexity and power, but still composed of the same elements. Thus if we study the ruminants we discover that the act of eating in them is complicated by the addition of two or three new processes. The food after having been swallowed once is returned to the mouth again in morsels, and then chewed and swallowed a second time. If you study the actions of the ox you will find that his regurgitation is not reflex, but entirely voluntary, and as it is followed by all alike, without instruction, and contributes to the function of digestion, it is evidently instinctive. Now in view of our previous analysis, I presume that all of you will agree that this act is in its nature like all the other acts concerned in eating, that is to say—the animal is so constructed as to be capable of this act, and to receive an intense pleasure from it, and it performs it

for the sake of the pleasure. In its nature, therefore, it is perfectly comprehensible, and it is interesting as the first step towards that extreme multiplicity of instinctive action which we find lower down in the animal kingdom.

In many brute animals we find the act of smelling is invariably connected with food. If you offer a horse or a dog some kind of food, the smell of which is not entirely agreeable to him, the desire of tasting does not arise, and no effort can induce him to touch it. The same instinct is faintly exercised in man, but in those animals where the olfactory bulbs of the brain are large, it becomes a controlling impulse, and if the smell of the food displeases, the desire of tasting and chewing never arises. We understand perfectly how this may be. These animals will not taste an article whose smell they dislike any more than a man will chew and swallow food whose taste he dislikes. The sense of smell is given them to guide them in the selection of food, instead of reason, and like the act of ruminating it adds another step to the series of instinctive acts, but does not obscure their nature. We now see how it is that brute animals so unerringly reject plants which are poisonous to them. They do not know by instinct that the plants are injurious, as some imagine, but they do perceive whenever they approach one, that it has what they hold to be a most detestable odor, and they never desire to taste what offends their nostrils. I suppose this is the whole mystery of brute instinct in rejecting poison.

Carnivorous animals add still another step, that is the pleasure of pursuit. Any one who is familiar with the dog or the cat knows that these animals seek their prey with an ardor kindled by the pleasure of the pursuit, and not merely by the expectation of obtaining food. If we go down a few steps lower we come to the rodentia, of which the squirrel, the beaver, and the muskrat are examples.

The reason of these animals is of a low order, and the instincts are of a high and complex nature. The squirrel for instance, in addition to the usual instincts respecting food, has a propensity to lay up in the autumn a store of provisions for future use. This also is to be noticed, as it is the first dawning of that remarkable instinct which in the bee is so highly perfected. What induces these busy little animals to heap up their store of nuts for winter use? What the exact complexion of the impulse is of course we

cannot tell. It is possible that the creature has reason enough for its performance, but in all probability it is instinctive, and if so we should attribute to it the same elementary nature as to other instincts, and decide that it is so formed by the creator as to derive a keen pleasure from the simple act, the case being in fact perfectly analogous to that of the dog, which is so organized as to derive an exquisite delight from the act of pursuing its prey. It is therefore in its nature like other instincts, a specific desire implanted in it, and correlative to certain external objects.

We also observe in the rodentia the remarkable instinct of building in great perfection, which it is important to study before we go on to the still more artistic labors of the bee and the wasp.

Now, gentlemen, as we are about to plunge into those thick mazes where so many reasoners have been bewildered and lost, I wish to make a full pause, fix our landmarks, and ascertain precisely where we are—otherwise we shall become confused.

Let us fix indelibly in our minds, therefore, this truth—viz: Instinct is not any peculiar agent, power nor faculty implanted in the animal, but only a certain established order of succession according to which the ordinary powers and faculties are exercised towards external objects. I, for instance, am created in such a manner that I cannot help desiring to eat at certain intervals. Now it is not some particular faculty or agent in me which feels that desire, but the veritable, self same, old fashioned I, myself, that do it, and I desire it in the self same common way as I desire anything else, and I suppose that in that respect I do not differ materially from the dog, the ox, the squirrel, the beaver, the ant, or the bee. They all desire certain objects or actions which are agreeable to them, and they cannot help it nor give a reason for it. Secondly, the animal that feels any desire will employ all its powers, whether reason, will, or bodily organs, to gratify it. Thus when a man feels the desire of food, he will bring into exercise, if necessary, all the skill and energy he has to procure it; and the dog, when he feels the desire to catch his prey, will bring into play all his little power of reason as well as his greater talent of running to assist him. The same thing may be observed in the stratagems of the cat. Hence almost every successful instinctive act includes several subordinate acts of reason, and an act is called instinctive, not because it is destitute of the agency of reason, but because it

contains a certain specific desire, implanted by the Creator for a certain object, but gratified by the animal merely for its own pleasure. Hence we see why instinctive acts remain unchanged from generation to generation, as long as the constitution of the race is the same. In order that I may obtain the pleasure of eating, I must select, not mud nor gravel, but food; I must put it in my mouth, masticate it and swallow it. Unless I do these things in this particular way, I cannot obtain the pleasure to be derived from eating. The same necessity has existed as long as men have, and we may assert that we eat our food to-day as Adam ate his ages ago, and so the last man will eat his ages to come. And for the same reason the bee builds her cell forever in the same form, and the wasp her nest always of the same materials.

The Rodents, as I said before, display the instinct of building. Thus the muskrat of our marshes builds a winter house of dead grass some four feet in diameter, in the middle of which it has a small chamber communicating into the water below. The beaver builds a similar house, but employs mud and sticks instead of grass. The latter also builds a dam across a water-course which retains a reservoir of water for its residence. Now that the building of the dam is done to gratify that specific desire of building implanted in them, and not from reasoning that a dam was necessary to make a pond, is proved from the fact that beavers in a domestic state have been known to build a dam across the apartment where they were kept, and where it could be of no earthly use to them. They evidently build from the love of building, and not from foresight of the necessity of it. A similar impulse, I suppose, urges them to build their houses. They do it not because they foresee the need of shelter, but because they enjoy the act, just as a dog not yet hungry will pursue a rabbit, not because he foresees the want of food, but because he loves to do it.

There is a specific desire, or capacity of enjoyment implanted in their constitution which causes them to receive pleasure in the employment of certain materials in a certain definite way, and it is not a whit more wonderful than that certain architectural forms should be more agreeable to men than others, or that certain operations of the jaws upon morsels of food should excite pleasure. The self-same principle prevails, only the specific desires of the beaver are more numerous than ours, and succeed each other in longer series.

I suppose the same explanation is to be applied to the actions of the bird which first builds a nest, then deposits its eggs, then renouncing its active habits sits upon them until they are hatched. And finally, I suppose the same elements of action guide the bee. As we go downward in the scale of the animal kingdom and find reason growing more and more weak, its place is supplied by a gradually increasing number of specific desires, which tempt the animal to do what its reason is incompetent to dictate, until in the insects the multitude and complexity of them astonishes us. In the bee it would seem that these special impulses had become so numerous that they could no longer be all contained nor exercised by the same individuals. We accordingly find a hive of bees divided into three classes, and each class exercises a certain part of the instincts. They are the drones, the queen, and the workers. The queen is possessed of all the instincts which pertain to the production and depositing of eggs, but is entirely destitute of those which pertain to the care and preservation of the offspring. The latter, as well as the instincts of building and laying up food, are possessed by the workers.

At a certain period the body of the worker secretes the scales of wax of which the comb is built. The bee previous to this spends a period in a state of inaction. When the secretion of wax takes place the desire to build follows it, and the bee proceeds to lay up those marvellous structures which astonish us so much. It always builds in a certain form, not because it knows that form to be best, but because building in that form is agreeable to it, and produces pleasure. When it has expended its store of wax, I suppose the instinct of seeking honey succeeds it, which may be very analagous to the disposition of other animals to seek food. When it returns laden with nectar, the impulse to disgorge it into a cell of the comb is not a whit more strange than the desire of the ox to throw up food from his stomach for rumination. As the desires of the several acts which constitute eating succeed each other in a determinate order, without our being able to change them or give a reason for them, so I suppose the more numerous desires of the bee succeed each other in their own constitutional order, and do not differ materially from our own desires except in the number and variety of their objects. Hence the fixed and orderly succession of their external acts, and hence the reason why the bee needs no instruction,

but builds on from age to age according to the beautiful plan which God had made for it in the beginning.

You perceive that the view which I have presented implies that brutes are possessed of mind. Such is my belief, and such is the opinion of nearly all naturalists. Indeed I do not see how it can be doubted for a moment. Desire is an act of mind, and therefore whatever animal is capable of that act, has mind. Indeed if, as I suppose, desire is an essential element of instinct, then if an animal had not mind, it could not have instinct. Every one knows that animals feel joy, sorrow, fear, and anger. They perceive, remember, and know, and finally they exercise the will. But joy, sorrow, perception, memory and will are attributes of mind. It is nonsense to talk of their being mere machines. A machine does not feel emotions, exercise perceptions, or put forth volitions. I cannot dwell on this point : suffice it to say, that the evidence of the existence of brute mind is clear and full. Now the question is often asked with a timid air whether this does not weaken or destroy the evidence of the immortality of the human soul. Now, gentlemen, I shall not go to work here to prove the immortality of the soul. Suffice it to say that I expect to live forever, after this body has crumbled in the dust, and I am ready to give solid reasons for that expectation to any one who may demand it of me at a proper time, but the topic that is now before us is whether the possession of mind by brutes invalidates that belief. There is an infidel argument on this point which is often hinted and half set forth, but which you can seldom get the objector to bring out in full. I wish to set this argument clearly before you, that having once seen it face to face you may not hereafter be uneasy at its shadow. The argument first goes on at a good length to prove what I have just asserted, that brutes exercise the characteristic functions of mind. Now the brute, say they, is a mere physical being, or if there be something more elevated it is but temporary, and the animal at death is entirely extinguished. But man's mental actions are essentially like those of the brute, only differing in power. Consequently his nature is in all essential respects like theirs, and if they are extinct at death so also must he be, and his hopes of immortality are a fiction. This, when properly expanded and inflated, makes a great swelling argument of a wondrous learned look, but there are two fatal defects in it. First, that the premises are not

proved, and second, the conclusion does not follow from them. You are to remember that the immortality of the human mind is not asserted because it thinks, but on the ground of revelation; and it rests for evidence on the plain historical question whether that revelation came from God or not; but here it is proposed to prove that a man totally expires at death, on the ground that the brutes, who are like him, are annihilated then, when the fact is nobody knows whether they are annihilated or not. Animals possess mind, they say. Well, what of it? Why they are just as much entitled to be considered immortal as man. Well, what of that? If they choose to consider brutes immortal I have not the slightest objection. I trow that eternity has room enough for them. If the immortality of brutes is a necessary inference from that of man, we are bound to admit it. Who knows anything about it, or can contradict it? I know that there is a loose popular idea that the scriptures teach the extinction of brutes at death, but if you examine the subject you will find nothing on that point, save two or three very doubtful allusions incidentally brought in, and proving nothing in respect to it. Furthermore, we do not know that brute minds and human minds are destined to the same duration. Notwithstanding all the argumentation on the subject, we are utterly ignorant of what the causes of immortality are, and as there are a great many points of difference between human and brute mind, we cannot tell but this is one of them, viz., that one is constructed so as to exist for a time and expire at its appointed hour, while the other among its various additional powers, enfolds within itself the causes of immortal life. But if a man still insists that all mind must necessarily partake of the same destiny, then I say that unless a man is an atheist, and denies the existence of any intelligent God, he must follow out his reasoning one step more. If there is a God, then man is not alone related to the brutes beneath. In that he has knowledge, emotion and will, lays his plans by intelligence and executes them with power, he resembles the God above. Now go on with the brute analogy one step more—will God also die because he resembles man in the same respects that man resembles a brute? If this mode of inference have any force, we have a perfect right to commence at the top of the series and reason downward, to say that since the mind of God exists forever, our minds will also. If any push the argument further, and say that then also.

will brute souls live forever, I say that it disproves nothing—who knows that they die? The reasoning is equally good upwards or downwards, but the annihilation of brutes from which the infidel argument starts is entirely uncertain, while the eternity of God, on which the other rests, is sure to all but atheists. Therefore if the light of revelation were extinguished, and we were driven to the use of this doubtful style of proof, we should at once take our stand upon the known premise, and say God liveth forever—and by all the analogies of glorious thoughts, of richest emotions and of commanding will, kindred to the elements of his immortal being, will we also kindle the hopes of our immortal life.

ART. V.—*An Appeal.*

The members of the Medical Profession in this State, have already been informed, through the pages of the *Peninsular Journal*, that the American Medical Association, at its meeting in Philadelphia, resolved to hold its next annual session in Detroit, which will take place on the first Tuesday in May, 1856.

The Delegates from the State Medical Society, as well as those who represented the more local organizations, (all of whom concurred in the effort to bring about this result,) were actuated by a desire, through this instrumentality, to arouse the profession in this State to a consciousness of the position it is entitled to occupy in community, and of its ability and duty to exert an elevating and conservative influence upon the public opinion, by the cultivation among themselves of an elevated esprit du corps.

That these expectations may be realized, it becomes necessary for the Profession of the State to organize itself more extensively than it has hitherto done, as no physician, except by courtesy of the national body, under prescribed forms, will be entitled to take a seat in the association, or participate in its proceedings, unless he has already become a permanent member, or is a delegate from some medical society, the members of which have adopted the code of Medical ethics prescribed by the American Association, or is a representative of some medical school or hospital, or asylum.

The undersigned, therefore, earnestly appeals to his brethren throughout the State, to adopt such measures as will secure a general organization of the profession in Michigan, and a large and re-

spectable representation from every section of it, at the next meeting of the Association.

WM. BRODIE,

Sec. Am. Med. Association.

P. S. A copy of the code of ethics above referred to can be found in vol. 1, No. 2, of the Peninsular Journal.

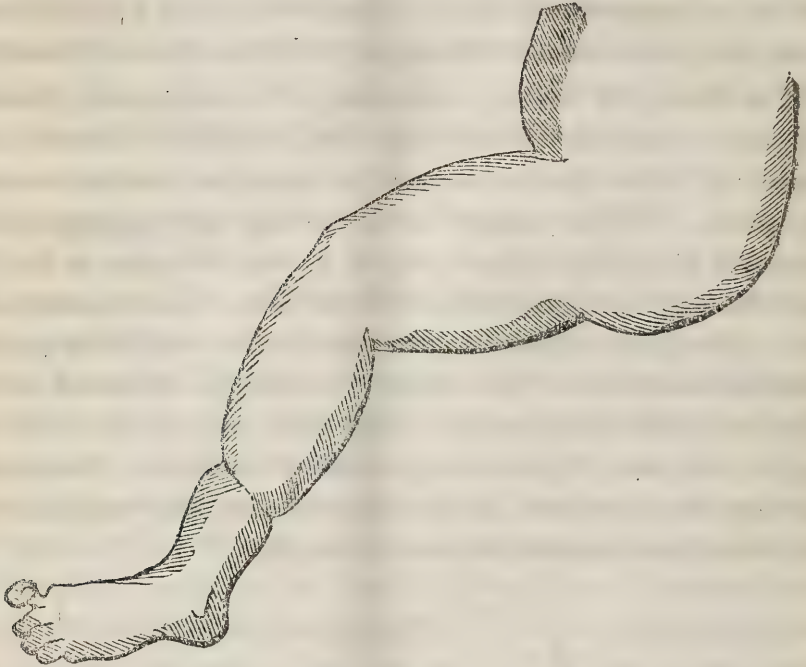
ART. VI.—*Amputation in Utero.* Cases observed by Prof. PITCHER, and read at the Annual Meeting of the State Medical Society.

“The family of Mr. — consisting of three persons, (himself, wife, and a child about three years old,) arrived in Detroit in the summer of 1853—Mrs. — being at the time four months advanced in gestation. Whilst engaged in unpacking their baggage, one of the trunks which had a heavy top to it, was left open, so that the upper half stood at right angles with the lower, which rested on the floor. The child, desiring to participate in the work of its parents, thrust its arms into the open trunk. In doing so, it caused the upright part of the trunk to fall. The right arm of the child was caught in the jaws of the trunk, just below the elbow. The mother was very much excited, as she supposed that the weight of the trunk must have crushed the arm of the child.



The child got well, and the recollection of this incident had passed from the mind of the mother, till it was recalled, by her giving birth, at her full time, to an infant, whose right arm was amputated one inch below the elbow, the development to that point, being perfect.

No. 2.



Of the second case, of which the xylograph No. 2 is an illustration, the history is less complete. The mother became an inmate of St. Mary's Hospital when the child was about ten months old. She stated that at the birth the leg presented the deep constriction seen in the figure. The bottom of the groove appeared abraded, or to use her own language, appeared raw. The constriction was probably considerably deeper at birth, as the drawing was made when the child was ten months old. In addition to this, the smallest toe was entirely absent, and also the distal phalanges of the 2d, 3d, and 4th toes. Around the proximal phalanx of the great toe a deep groove existed, caused by a fillet connecting it with the other toes, which was removed by the mother after birth. Unlike most of the cases recorded by Montgomery, the lesions occurred in this instance on the right leg and foot."

The first of the above cases, (Fig. 1,) presents one of those re-

markable coincidences upon which the popular mind, ever impatient of the slow process of scientific induction, has based its theory of the influence of the maternal mind upon the organism of the foetus in utero. And, indeed, considering the strictly reliable history and scientific accuracy of the observations by which the coincidence is established, it must be admitted to possess far greater claims to attention than a large majority of the fanciful analogies and remote resemblances which the easy credulity of the unscientific readily accepts in lieu of well established facts. It is not, however, intended to deny the possibility of modifying the organism of the foetus through the medium assumed, or to ignore the facts by which the hypothesis to a certain and very limited extent is proved. Acting through the nutritive plasma furnished by the mother, the foetal organism may indeed be even fatally impressed by powerful mental emotions; but this fact has no direct bearing upon the numerous class of specific abnormalities illustrated by the above cases, and supposed to have their origin in the same cause. A large proportion of these so called *lusus naturæ*, thanks to the labors of G. St. Hillaire, Barkow, Meckel Vrolik, Serres and others, have now undergone a careful anatomical scrutiny, and have been shown to be distinctly referable to two great groups, the embryonic history of which is marked by a partial or general, plus or minus degree of development. A few, however, that are generally referred to the operation of the same cause, have recently been shown to originate at times in fortuitous lesions, occurring at various periods of foetal life, and which the known history of development enables us with proximate certainty to designate.

Setting aside the numerous instances in which the most earnest and searching recollection can detect no connection with mental impressions, in the cases of apparent coincidence such as the above, the synchronism of the event with the assumed cause is of the rarest and most accidental character. It is scarcely necessary to remark that this fact alone is decisive of the fallacy of the hypothesis in question.

For a summary of most of the cases on record of those accidental lesions and spontaneous amputations of the limbs of the foetus in utero, science is indebted to Montgomery, Simpson, and Gurlt, and to the first named distinguished author especially for the facts upon which a rational explanation of the mode of production is based.

For a full exhibition of the beautifully graduated series of facts, and as a fine specimen of scientific induction, the reader is referred to an essay appended to his Signs and Symptoms of Pregnancy, and to the able article Fœtus, in the Cyclopaedia of Anatomy and Physiology by the same author. It is sufficient here to state that the amputations were effected by the gradual constriction of a cord which in some instances was the funis of the fœtus, in others by an abnormal production, supposed with much plausibility, by Gurlt, to be in most instances a production of the foetal membranes.

Whether the groove of the leg in our second case was caused by the pressure of the funis, as in cases of Montgomery and O'B. Adams, or by an abnormal production, as in a case of Zagorsky, cited by Simpson, it is impossible now to decide.

The absence of the deficient part of the leg, in the first case, militates somewhat against the hypothesis of amputation, and yields perhaps an equal support to the presumption of arrest of development, yet it cannot be held to be quite conclusive in respect to either; for it is quite in consonance with facts well known that the lost member should have been dissolved in the liquor amnii. It is only necessary to assume the early occurrence of the lesion to render this view of the subject quite consistent and tenable.

If however, (as undoubtedly we may without any violation of probability,) assume it to be a case of arrested development, it will then be regarded as one of the slighter cases of an extensive series commencing with the absence of perhaps a single digital phalanx, and proceeding by a finely graduated transition in which by the cohesion of parts, and their final obsolescence, the formative history of the fœtus is often beautifully illustrated, through the various grades of sirenornelia, sympodia, and uromelia, until the history of arrested development culminates in either an imperfect trunk, destitute of both head and limbs, or even in a head so defective that but a single organ can be distinctly traced in it.

When viewed in this natural connection, the case acquires a philosophical interest, as it points to a unity of causation for the entire series, the search for which can be successfully prosecuted only among the profounder laws of comparative embryogeny.

A. SAGER.

ART. VII.—*Case of Monstrosity in an Embryo Fish.*

The following communication upon a case of duplex monstrosity in a fish, and which in relation also to the genesis of similar human monstrosities is in the highest degree interesting, was made by the distinguished zoologist, M. Quaterfages, at the session of the Academy of Sciences, on the 19th March.

He would have delayed the publication until further observations could have been made, if he had not had, even now, one of the rarest specimens of this nature ever exhibited. He had succeeded in tracing the development of this example of duplicity which originated in the fusion of two originally separated individuals, for about two months, viz., from 24th Jan. to 18th March. These are the first observations having a direct bearing upon the solution of a question that has been mooted by the most distinguished savans for the last two hundred years. The ovum which M. Q. received on the 24th Jan., and from which the monstrosity came forth, had been broken open for 18 or 20 days. Previously, a tolerably deep fissure, the index of the place of cleavage of both yolks, was still quite conspicuous. This fissure being the only remaining index of the place of cleavage or separation of the two yolks, all the rest having coalesced into a single homogeneous mass. Two young fishes, with their heads opposed to each other, were suspended to this compound yolk, and entirely separated from each other. The right one joined to a face otherwise imperfect and destitute of eyes, a well developed body; while the left one united with a malformed, hunch-back, and corkscrew tail, a head complete in its development, the eyes alone excepted, which were not quite round. The only deviation from the normal condition of the vascular apparatus was observed in the right cheek of the right fœtus, and also a semicircular space in the right ocular region, in both of which an accumulation of blood existed. The abdominal veins which formed the *venæ portarum* were in their normal position; their branches, which were distributed without distinction over the double yolk, inosculated with those ramifications of the *omphalomeseraic* veins which at a later period formed the *venæ hepaticæ*, and the highly curious and important observation was made that between the ultimate ramifications of the abdominal veins of each fœtus and the corresponding twigs of the vitelline veins of the other,

there existed numerous anastomoses by which a constant and perfect interchange of blood of the two systems took place. In the right fœtus moreover, the yolk vascular system was much more fully developed, which furnishes a ready explanation of the relative inferiority of the left fœtus. The advantage thus early obtained by the right fœtus was continued through the subsequent steps of the development, which in other respects was normal. On the 19th February the embryos came in contact in such a manner that one was placed above the other. The abdominal walls now adapted themselves in such wise as that the right edge of the right embryo was fused with the opposite, while on the left it was still separated by the yolk now introduced into the cavity. On the 19th March the yolk was almost entirely absorbed, and the right embryo so far developed as to require further nourishment. The union was now complete; the two individuals were attached by a somewhat narrow band on the abdominal surface at the point of entrance of the abdominal veins into the liver. The right embryo had acquired the preponderance, and, although blind, bore its brother, now so changed by increase of malformation as to resemble a ball. The arrangement and structure of the organs could now be conjectured about as well as after anatomical inspection. Union of the livers must have occurred, and perhaps also partial fusion of the intestinal parietes; in all other respects the viscera would have been unchanged so far as the influence of this cause is concerned. From these observations it results that this duplex monstrosity was formed by a fusion of two originally separate individuals, thus sustaining the views of Lemery in opposition to those of Winslow and Haller; the views of the former in later days adopted also by the St. Hillaires, although opposed by the high authority of Meckel.—*Monat. für Geburtskunde, June, from Gaz. Med. de Paris, March, 1855.*

The remarks of M. Quatrefages in connection with the exhibition of this specimen, elicited some interesting comments from the distinguished teratologist, M. Serres. "In this ichthyological duplicity," he said, "the union of the embryos occurred by a fusion of the umbilical vesicle of both, which thus became one, as was clearly proved by the condition of the omphalo meseraic vessels, so well exhibited by M. Quatrefages. In birds an analogous union sometimes takes place of the allantoid vesicles. In the vertebrata

the fusion of two separate organisms always takes place in similar parts. In this manner by the union of pelves, of abdomens, of chests, or of heads, the great varieties of duplex monstrosities are produced. These facts, so frequently and so well observed by recent anatomists, have banished from the domain of science the hypothesis of grafting, which prevailed till the close of the last century. They also prove that the botanical hypothesis of deduplication or chorization, however attractive in itself, or well sustained by the structure of the leaves and petals of certain plants, as well as of polypi, infusoria, zoospermes, &c., is still incompetent to the satisfactory explanation of the duplicity of the vertebrata." Neither the frequent and common examples of a duplicity of fingers or toes, which appear so obviously to have their origin in the deduplication of the collateral arteries of the pulmar arch, nor those cases of great inequality of development of the two fœtuses called heteradelphs, constitute in the opinion of M. Serres an exception in favor of even the partial application of the botanical theory. His farther remarks related to the viability of duplex monsters in man and other vertebrates. Ritta-christina lived eight months and some days; Philomelaet Helena survived two months; Maria Hortense one month and a half. The records of science contain instances of double individuals living even beyond the period of infancy—the most remarkable of which is that of two young men who attained the age of twenty-eight, and were maintained at the court of James III of Scotland. (The writer here ignores the no less remarkable example of the Siamese twins.) Like Ritta-christina these were double above the umbilicus, and single inferiorly. Like them, too, impressions upon the inferior extremities produced a sensation common to both, while impressions upon the superior parts were strictly individualized. Great care was taken of their education. Both were proficient in music; they had acquired several languages, *et variis voluntatibus duo corpora secum discordia discutiebant, ac interim litigabant.* Their death, moreover, like that of Ritta-christina, was not synchronous—one survived the other several days, and the death of the last seemed to be hastened by the decomposition of his dead brother.

In these examples the duality of life is carried to a unity by the transposition of all the thoracico-abdominal viscera of one of the conjuncts, while those of the other preserve their normal relations.

Thus in Ritta, in Philomela, and in Maria, (the right ones of examples above named,) the liver was situated in the left hypocondrium, the stomach in the right; the coecum occupied the left iliac fossa, the sigmoid flexure of the colon was found in the right cavity of the ilium. The heart was situated in the right cavity of the thorax; the arch of the aorta descended on the left side, corresponding in each case with the brachio-cephalic trunk, and, as if to complete this peculiarity of arrangement, the right lung, like the left in its normal condition, was marked by but two deep fissures. The corresponding viscera of the left conjunct sister in all these instances preserved their normal connections and relations.

The question very naturally suggests itself, Does the development history of these foetuses furnish an explanation of this remarkable change in the visceral relations of one, while those of the other remain normal? This phenomenon, upon which the life of the conjugated infants depends, is caused by the union of the liver of both; but before the accomplishment of this object, it is indispensable that the liver of the right one be transposed in order to come in contact with that of its associate, it being equally necessary that that of the left should preserve its normal position. This is effected by the union of the umbilical veins which thus serve as a *gubernaculum*, to this arrangement at once irregular and normal. The transposition of the liver being effected, it is readily seen how, and why, the right auricle and ventricle are drawn by the inferior cava and subhepatic vein from their normal position in the right side into the left, effecting by the same movement of semi-rotation the transposition of the left auricle and ventricle with the apex, into the right side. These mechanical evolutions and their final results are then the consequences of the union of the livers and the umbilical veins that occur in the progress of development. This evolution of the base of the heart of one of the conjuncts by effecting a complete separation of their venous and pulmonary circulation prevents the rapid supervention of death which would result from the admixture of their fluids. We see here by what a simple and admirable mechanism nature transposes all the viscera of one of the associates for the benefit of the life common to both.

At the session of the Academy of the 16th April the theory adopted by M. Quatrefages was discussed by some of the ablest French embryologists. M. Coste denied that duplex monstrosities

had their origin in the coalescence and conjugation of two vitelline vesicles, and expressed his conviction that such conjugation was a more profound and primordial phenomenon than mere adherence. He subsequently spoke of the phenomenon of circulation in double monsters and osseous fishes. That circulation might be considered as common to both embryos. Such is the combined and reciprocal arrangement of the vessels that the greater part of the blood that had circulated in the body of one was passed through the liver by the emphalo-meseraic artery, into the umbilical vesicle, from which it was collected and conveyed by a vein to the right auricle. The contraction of the two hearts was not inchronous, but the contraction of the ventricle of one was synchronous with the dilitation of the auricle of the other.

M. Isodore Geoffrey St. Hillaire thought the views of M. Coste, although applicable to many cases of duplex monstrosities, were not applicable to all. In support of that opinion he adduced those examples in which the degree of union was too superficial and limited to justify the supposition that its origin had so early a date as those having more complete conjugation. After some further conversation by M. Serres and M. Coste, M. Quatrefages commented upon a letter of M. Lereboullet, who from recent researches upon the development of the pike had been led to believe that duplicity had its origin in the formation of two centers in the same germinal area; each of these centers gave origin to a primitive stripe, which soon becoming grooved constituted the first trace of the incipient embryo.—*Archives Generalcs, Mai et June, 1855.*

This observation of Lereboullet, of the formation of two rudimentary embryos in one germinal area, is believed to be the first ever made in the class of fishes. Similar observations had however been made by Allan Thompson, Van Bær and others, in relation to birds. We have here a relation existing that must inevitably lead in the progress of development to some degree of union, though it be but the slightest conjugation at the umbilicus. An instance of this kind is recorded by the celebrated C. F. Wolff, in the ovum of the common hen. In the egg of the goose, observed by A. Thompson, the union was advanced to the production of a single heart, while the exterior development of the body was nearly complete.

Without resorting to the hypothesis of rupture of membranes, or

the disproved conjecture of the fusion of the germs of separate yolks, we need but assume (what seems in every way probable,) different degrees of proximity or contact of the primitive stripes, either lateral or polar, to account for nearly every variety of duplicity, whether lateral, anterior, or posterior, or even superior and inferior, as coalescence must of necessity take place whenever parts in their early stage of histogenesis are brought in contact with each other. Even the case of *M. Quatrefages*, when closely viewed, will not be found to militate against this hypothesis, for although it might be inferred, it is by no means clear that two distinct yolks ever existed; a homogeneous yolk with a deep fissure separating two germs was the condition when first observed. It seems not improbable that this fissure may have resulted from the fissiparous process extending through the germ yolk into the food yolk, each half of the germ yolk completing the process of fission independently; and in thus originating two blastodermic or germinal areas, presenting an analogy to what according to Agassiz, not unfrequently occurs in the ova of the gastropod mollusca, to wit—the formation of two distinct yolklets by fission from a yolk originally single.

If however, the statement of Vrolik be accepted, that all the cases of monstrosity by excess form but a single and nicely graduated series, “passing without any abrupt steps from the addition of a single ill-developed member to the nearly complete formation of two perfect beings,” it remains for future researches to show whether the theory here adopted will suffice for the explanation of the entire series.

A. SAGER.

ART. VIII.—*Chloroform in Pertussis*. By WM. W. GREENE, M.D.

MESSRS. EDITORS:

During the past winter I noticed in a No. of the Journal, the statement that a physician at the south, (whose name as well as residence I forget, the article being mislaid,) had used chloroform in whooping-cough with satisfactory results.

Although a brief statement of the fact merely, I was neverthe-

less inclined to attach considerable importance to it, having thought considerably of the matter previously ; and by that statement was led to reflect still more upon the matter, until I became so thoroughly convinced *theoretically* of the rationality of such treatment that I resolved to embrace the first opportunity for an *experiment*, rejecting the senseless tenet of some hair-splitting moralist that "physicians should never experiment."

The fact that pertussis in its severer forms, and particularly in the various complications it presents, is a serious and oftentimes dangerous malady ; that the treatment generally employed has been merely palliative, if not often irrational and injurious ; my own convictions that the disease is in its pathology essentially *nervous*, and that the *materies morbi*, whatever it be, will not manifest itself unless it can act upon the nervous centres : these premises, together with the impression that the experiment could do no harm if cautiously conducted, led me to my resolution.

During the last spring, the prevalence of a severe epidemic of the disease under consideration, in this neighborhood, afforded me an excellent chance for the trial, with the results of which I was highly gratified.

My mode of administering it was by inhalation, during the paroxysm, directing the nurse to drop 30 drops in a soft handkerchief and hold it within an inch of the nose until the paroxysm subsided ; to be repeated on its recurrence. I never found it necessary to increase the quantity, and was always very particular in the directions to avoid any possibility of mischief. I never thought it advisable to tell the patient or nurse what the article was, lest prejudice might prevent a strict adherence to the prescription. Have administered it to all ages, from delicate infants up to adults of 45, with the same happy effects. One delicate child, one year old, who had suffered severely for three weeks, was cured entirely by one inhalation. A little girl of ten years, previously suffering from valvular disease of the heart, had been suffering from pertussis for four weeks, was much debilitated, and when I saw her was suffering from congestive inflammation of the left lung. Together with appropriate treatment for the pneumonic complication, I immediately commenced the use of chloroform. In two days the paroxysmal character of the cough was wholly subdued, and in a few days she was perfectly well. In cases complicated with bronchial

or pneumonic congestion, or inflammation, I have used the chloroform in connexion with other appropriate treatment, and *invariably* with the effect of entirely relieving the paroxysmal character of the cough. To use the expression of the nurses, "it breaks it up."

My experience in the matter has thoroughly convinced me both of the efficiency and safety of the remedy; and I feel that we have a weapon which disarms pertussis of all its terrors.

North Waterford, Maine.

SELECTIONS.

Cutaneous Nævi cured by the application of Iodine Paint. B. S. EDWARDS, M. D., Physician- Accoucheur to the Samaritan Hospital for Women, etc.

During the past twelvemonth I have met with two cases of cutaneous nævus in infants, which have been most satisfactorily and completely eradicated by means of the external application of iodine paint.

The first instance in which I was induced to employ it, was for a nævus unfortunately situated on the side of the neck of a female infant. At birth it appeared simply as a small, red shining spot, which in three months increased to the size of a fourpenny piece. The mother of the child at this time positively refusing to have any escharotics employed, fearing that it might give rise to a permanent and greater deformity, I recommended astringent and cold applications to be employed constantly, and this was kept up for some time, but with no good result. The nævus at the end of ten months had acquired additional size, and was observed to become redder and a little more elevated, whenever the circulation was increased by crying, &c. The parents still refusing any of my former suggested remedies, or even vaccination, "until it grew worse," I recommended the use of iodine paint, which was regularly employed by gently painting over the surface with a camel's hair pencil every alternate day, occasionally leaving it off for three or four days when the skin was very irritable and rough. Under this treatment I was pleased to find that the growth of the nævus was arrested, became smaller and mottled, and finally disappeared; a speck or two alone being visible to mark its former site.

The second case was very similar; it occurred in a little boy

nearly two years of age. The nævus was about the size of a shilling, but slightly elevated, and situated on the abdomen, and had gradually but very slowly, increased since birth. No treatment had been employed, the physician who attended the mother of the child having advised nothing to be done unless it increased. The tincture was commenced in September, 1854, and was continued more or less up to last month, when the disease had disappeared, leaving scarce a trace of the mischief.

I know not whether others may have made trial of this treatment, but its success in these two cases has induced me to draw attention to it, as it is a plan so simple in its character that I can see no objection to its employment. In neither of these cases did it produce fever, or, in fact, any effect upon the general health. It is difficult, of course, to decide what might have been the result had these cases been left to themselves without treatment. I have seen several that in the course of time spontaneously disappeared; but still the fact that each of the above cases had gone on increasing up to the commencement of the treatment, and then began shortly to recede, and finally disappeared, must induce the belief that some considerable merit is due to the iodine, and that it deserves a more extended trial.

The many plans that have been proposed and adopted for producing inflammation in, and consequent destruction of, the nævus, are mostly attended with serious objections—*caustics*, by occasional extensive ulcerations, serious hæmorrhages, and by exciting not unfrequently considerable constitutional irritation. *Vaccination* has, I believe, generally failed, and when successful has the disadvantage of leaving the ordinary cicatrix. The seton, needles, the injection of fluids, and lastly, perhaps the best of all, the knife, have an aspect of seriousness to the parents, and are all fraught with occasional serious consequences. The latest plan which has been suggested, is that of Mr. J. B. Brown, who has produced pustules on the cutaneous nævus by means of tartar emetic ointment. Besides the almost certainty of a larger or smaller cicatrix being left, in one of his cases it occasioned very serious sloughing of the neighboring parts; objections to its employment about the face and neck of a very decided character.

Under these circumstances, I feel desirous of drawing attention to the above examples, that others may put to the test the value of iodine in these troublesome malformations of the skin, and which, if they would kindly give me the result of their trials, I should esteem it a favor.—*Medical Times and Gazette*.

Removal of Metals from the System by Galvanism. By G. HUFF, M. D., Lexington, Kentucky.

To the Editors of the New York Medical Times :

GENTLEMEN—Having experienced the beneficial effects of galvanism in extracting metallic poisons from the human organism, and believing it to be a subject of much interest to the profession, I now place at your disposal a report of my experiments.

Very respectfully yours,

G. HUFF.

CASE I.—Mrs. W——, aged 27 years, of lymphatic temperament, with auburn hair and white skin, had been under treatment for diseased spine fifteen months. During this time she had taken very large quantities of mercury, which, her medical attendant stated, produced paralysis of the lower extremities.

I was called in consultation by the advice of her physicians, and it was decided that she should be put under treatment by galvanism. Her physicians having thrown upon me the entire responsibility of the case, I took charge of her; and one day while making an application of this potent agent to the spine, the feet having been placed in a metallic bathing-tub with acidulated water, her husband suddenly called my attention, exclaiming at the same time, “See the mercury!” On making an examination, I found several globules of metallic mercury lying on the bottom of the tub. I continued this (electric) treatment a long time, and she ultimately recovered, and now enjoys the powers of locomotion most perfectly.

CASE II.—Mr. B——, aged 40 years, of nervous temperament, with dark hair, white and thin skin, had been treated for syphilis for a long period, and had been repeatedly salivated, from which he had suffered severely in the joints. The capsular ligament was so much elongated as to cause luxation of the head of the *femur*; separation of the *carpus* of each hand had taken place, and the metacarpal joints of the fingers were very much enlarged. He had been under treatment of physicians who stood deservedly high in the profession, and had visited warm springs in Arkansas by their advice. At this time he could scarcely move with crutches, even with the help of two attendants which he took with him. He remained there one winter, and returned without having obtained any relief. His friends then advised him to apply to me, and, with the consent of his physicians he did so. On examination of his case I concluded to treat him, and commenced with warm baths, which invariably left him worse, the joints becoming more stiff and painful, and with less mobility. Believing that the remote cause of this aggravation of his disease was the presence of mercury in his system, I was induced to attempt to extract it. To accomplish this, after having placed him in a porcelain bathing foot-tub, with acidulated water, and a metallic plate beneath his feet, I completed the circuit,

and after the lapse of twenty minutes I discovered a light-white precipitate, and the impress of his toes left on the plate of a light bluish color, with silvery lustre. I repeated this operation several times, and then commenced the galvanic treatment for rheumatism, and infused iodine into the joints in order to produce absorption of abnormal secretion that had formed there. From this time he commenced to improve, and went on improving without a relapse. All the joints have now recovered their normal condition, with the exception of the left hip-joint, the femur of that side now remaining seven-eighths of an inch below the right, although it has ascended three-eighths of an inch during my treatment; his general health has very much improved; in fact, he says it is now as good as it has been at any period of his life.

CASE III.—Mrs. N——, aged 28 years, of bilious temperament, small size, hair and eyes black, of a very high order of intellect. At the birth of her second child there was very profuse hæmorrhage, and much inflammation of the uterus was superadded in consequence of medicines having been imprudently given by her physician to facilitate labor. For the purpose of suppressing the hæmorrhage and restoring the uterus to a healthy condition, sugar of lead was given in small doses, and its use continued for a long time. This treatment resulted in *lead palsy*, (the total loss of muscular contraction of the extremities.) In order to extract the lead from her system, I commenced the treatment by galvanism in the same manner as in the foregoing case, and with the same results, except that the precipitate was of a dark grey color, and the impress of the toes left on the plate was of a darker hue. When the paralysis was nearly removed, partial amaurosis set in, which ultimately became total. I treated this without benefit, although I think the treatment has not been fully tested, as she was obliged to return home, in consequence of domestic cares, sooner than I anticipated.

Lexington, Ky., May 8th, 1855.

[The preceding communication contains results which will doubtless be novel to most of our readers, and which would seem to be of value in a therapeutic point of view. It derives additional interest from the fact that, at the meeting of the Imperial Academy of Medicine of Paris, held January 29, 1855, a note was presented from MM. Vergues and A. Poey, on *the new application of electro-chemistry to the removal of metals from the system*. We extract the following account of the disease and process from the *L' Abeille Medicale*, 15th Feb., 1855:

M. Vergues, who had on the back of his hand an ill-conditioned ulcer, caused by the introduction of metallic substances in the process of gilding and silvering by galvanism, on plunging his hands into an electro-chemical bath at the positive pole, found to his great surprise, a metallic plate in contact with the negative pole, covered, at the end of a quarter of an hour, with a thin layer of gold and

silver. A few baths proved sufficient to radically cure the ulcers, which had previously resisted the most active means. The first experiment was made at New York, the 16th of April, 1852, and was followed by several others, which had led to the introduction of a new therapeutic mode of removing metals from the system.

The patient is placed up to the neck in a metallic bathing tub, isolated from the ground, and made to rest in a horizontal position upon a wooden bench, the whole length of the body, which is to be also isolated from the bathing tub. The water is to be acidulated with the nitric or the hydrochloric acid for the removal of mercury, gold, and silver, and with sulphuric acid for the removal of lead.

One extremity of the bath is put in contact with the negative pole of the pile by means of a screw, and the patient takes hold of the positive pole sometimes with the right hand and sometimes with the left. The arm is held up by supports in contact with the seat. The extremity of the positive conductor which the patient holds is armed with a massive iron handle, wrapped around with linen, to diminish the calorific action of the current, which is very powerful, and which, without this prevention, would burn the hands.

The patient being thus placed, the positive current enters either by the right or left arm, circulates from the head to the feet, and is neutralized at the negative pole, on the sides of the bathing tub. Being isolated from direct contact with the negative pole as well as from the ground, the electric fluid radiates from the body into the bath, forming a multitude of currents from the entire surface of the body, which, after having traversed the internal organs, and even the bones, neutralize themselves upon the negative side of the bathing tub.

They say that they have thus withdrawn from the femur and tibia of a patient a large quantity of mercury, which, according to the opinion of several physicians, had remained there fifteen years.

The paper was referred to a commission, consisting of MM. Damas, Rayer, and Cl. Bernard.

The *Virginia Med. and Surgical Journal*, for May, 1855, contains also (in addition to the above) an account of an experiment made before the members of the Faculty of Medicine of Havana, in which a similar result followed the use of the same agent.

The metallic spots formed by this process are said to vary in size from that of the head of a pin to that of a pea, while some are microscopic.

In a letter received from Dr. Huff, subsequently to his communication, he says that he had never seen the process, nor read any work respecting what he calls "his method of extracting metals from the human system." He says, "my mode is constantly demonstrated by the ordinary course pursued for the electrolysis of metallic salts, by those engaged in electrotyping and electroplating." He speaks also of the solution of urinary deposits in the bladder by

galvanism without any *difficulty or pain*, and promises to communicate some interesting results on the subject.

The report of the Imperial Cabinet of Medicine has been copied in different journals in our country, and has been hailed as embodying a valuable contribution to therapeutics; and if future results confirm the hopes thus entertained, the paper of Dr. Huff will be invested with additional interest.—*Eds. N. Y. Med. Times.*

Twelfth Annual Session of the American Homœopathic Institute, held at Buffalo, June 7th and 8th.

During the early days of June, the daily papers of our goodly town gave note of preparation of this momentous occasion. Hotel keepers had heard of the rush of M. D.'s at Philadelphia, in May, and laid in extra roasts of beef. Reporters of the daily press were all agog. Especially important were the faces of the half dozen resident Homœopathic practitioners. When we saw the anxious cares that sate upon their brows, we were moved to sympathy.

The day arrived, as all days do except that of the Second Advent. About 10, A. M., two ladies, escorted by a pot-bellied philosopher with very roomy breeches and a huge cane, made a solemn entry into American Hall, which contained seats for 1200 persons. The crowd gradually increased until nineteen gentlemen were in attendance, when the roll was called, six of whom had the honor of representing Buffalo. The *tout-ensemble* at this moment was imposing. A disciple of Lavater present, noticed a physiognomical peculiarity in the noses of members. The nasal organ of each and every delegate was of the elongated Hebrew style, indicating a cross between the live Yankee and the Chatham St. "old clo' " man.

After the calling of the roll most of the members of the Institute were elected officers for the ensuing year. The Treasurer made a report, and no defalcations being evident, the Institute adjourned to 3, P. M.

Afternoon Session. Two or three gentlemen read reports said to be very interesting. (Singular fact that reporters for the press are very easily interested.) Twelve new members were reported, including one addition to the already numerous and talented delegation from Buffalo. The next business in order was reports of committees. No committees reported except Dr. F. Humphreys from the "Bureau on the Augmentation and Improvement of the Materia Medica." ("Big, fat words" were in order at this meeting.)

Then a resolution was introduced intimating that Dr. Humphreys himself had been augmenting the Materia Medica in the way of advertising and vending certain Homœopathic nostrums, called the

“New Era Medicines,” and a committee was appointed to post up the Institute on the subject.

The Institute then adjourned to 7½ P. M., to listen to the address of the President. At 8 P. M., we repaired to the hall. Three ladies and a couple of dozen gentlemen were in attendance. When we entered, they left; and the gas being immediately turned off, we were left in the dark as to the order of proceedings.

June 8. Morning papers announce that the annual address is to be delivered *this evening*—“no preventing Providence,” of course, understood.

Morning Session. Dr. F. Humphreys is on the anxious seat, accused of unprofessional conduct. Current of opinion runs against the doctor.

Afternoon Session. Dr. Humphreys refuses to make any concession, and leaves the room breathing threatenings and slaughter. His outraged feelings find “surcease of sorrow,” however, in the prospect of sundry fat libel suits against the Institute, or its members. Libel suits are among the most humane of civilized institutions, and seem especially provided for the consolation of afflicted scamps whose sins have found them out.

Dr. Humphreys having left, the Institute was so unkind as to expel him formally. After this, the great incident in the annals of this meeting, the Institute passed a resolution or two of thanks, and then adjourned. The annual address is still waiting delivery for the want of an audience.

And so terminated the most feeble attempt at respectability in point of numbers, appearance, talent or enthusiasm, we have ever witnessed. It was dismal and cheerless beyond description.—*Buffalo Med. Journal.*

Note on the Induction of Sleep and Anæsthesia by Compression of the Carotids. By ALEXANDER FLEMING, M. D., Professor of Materia Medica, Queen’s College, Cork.

While preparing a lecture on the mode of operation of narcotic medicines, I thought of trying the effect of compressing the carotid arteries on the functions of the brain. I requested a friend to make the first experiment on my own person. He compressed the vessels at the upper part of the neck, with the effect of causing immediately deep sleep. This experiment has been frequently repeated on myself with success, and I have made several cautious but successful trials on others. It is sometimes difficult to catch the vessels accurately, but once fairly under the finger the effect is immediate and decided.

There is felt a soft humming in the ears, a sense of tingling steals over the body, and, in a few seconds, complete unconsciousness

and insensibility supervene, and continue so long as the pressure is maintained. On its removal, there is confusion of thought, with return of the tingling sensation, and in a few seconds consciousness is restored. The operation pales the face slightly, but the pulse is little if at all affected. In profound sleep the breathing is stertorous, but otherwise free. The inspirations are deeper. The mind dreams with much activity, and a few seconds appear as hours, from the number and rapid succession of thoughts passing through the brain. The experiments have never caused nausea, sickness, or other unpleasant symptom, except, in two or three instances, languor. The period of profound sleep, in my experiments, has seldom exceeded fifteen seconds, and never half a minute.

The best mode of operating is to place the thumb of each hand under the angle of the lower jaw, and, feeling the artery, to press backwards, and obstruct the circulation through it. The recumbent position is the best, and the head of the patient should lie a little forwards to relax the skin. There should be no pressure on the windpipe.

The internal jugular vein must be more or less compressed at the same time with the carotid artery; and it may be thought that the phenomenon is due, wholly or in part, to the obstructed return of blood from the head. I am satisfied that the compression of the artery, and not of the vein, is the cause. The effect is most decided and rapid when the arterial pulsation is distinctly controlled by the finger, and the face loses somewhat of its color; and, on the other hand, is manifestly postponed and rendered imperfect when the compression causes congestion of the countenance.

This mode of inducing anæsthesia is quick and certain. The effects diminish immediately when the arteries are relieved from pressure, and are not liable to increase, as happens sometimes with chloroform and ether, after the patient has ceased to respire the vapors. So far as my experience goes, it has shown no tendency to cause faintness; and usually, after its employment, no unpleasant feeling whatever remains.

I think it may be found useful as a remedial agent in certain headaches, tetanus, asthma, and other spasmodic diseases, and to prevent pain in such small operations as the extraction of a tooth or the opening of an abscess. Whether the compression can be continued *with safety* sufficiently long to make it available in larger operations, has to be ascertained. But, whatever be the practical value of this observation, it is at least interesting as a physiological fact, and may be the means of throwing light on the causes of ordinary, medicinal, and hypnotic sleep, and of coma. Some facts encourage the supposition that the circulation of the brain is languid in ordinary slumber, and the etymology of the word carotid shows the ancient belief in the dependence of deep sleep on some interference with the passage of the blood through these vessels; and it is not an unreasonable conjecture, that hypnotic sleep may

be sometimes caused or promoted by the contracted muscles and constrained position of the neck compressing the carotid arteries, and diminishing the supply of blood to and pressure on the brain.
—*British and Foreign Medico-Chirurgical Journal.*

EDITORIAL.

Address before the "Michigan Institute of Homœopathy."

Our readers will bear with us while we once more recur to the subject of Homœopathy. We can assure them that however tired of, and disgusted with this whole matter they may be, it will be difficult for their aversion to exceed our own, and we approach it as we would any other offensive material, which nevertheless it might be incumbent upon us to remove from our path. In the past we have not thought it worth our while, and in the future we presume it will not be, to bandy words with men whom we regard in the same light that we do these professors and practitioners of Homœopathy, and consequently we have not noticed their numerous articles respecting us, with which some portion of the newspaper press of our State has abounded.

Of all that we have stated, however, respecting the system of Homœopathy, but a single remark—a solitary sentence—so far as we have seen, has been directly contradicted. In a former number we stated that Homœopathists "pretend that all diseases should be treated according to their *symptoms*, and not according to their nature and cause—that no attention in *treatment* should be paid to the *essential pathological condition*—that the symptoms or feelings, so variable and irregular, are alone to be regarded."

In a published address stated to have been delivered before the "Michigan Institute of Homœopathy," and the "citizens" of Ann Arbor, June 14th, 1855, the author, Dr. John Ellis, of Detroit, quotes the above passage, and says—"I doubt whether it would be possible in so few words, to more perfectly misrepresent the real

pretensions of Homœopaths than has been done in the above extract." A similar denial of the truth of this passage occurred in an article published in the Detroit Tribune, signed "E." and sent freely over the State, and thus an impression has been sought to be widely made, that we have been guilty of gross ignorance, or gross untruthfulness, in relation to this matter. We are in the address denounced as " 'pretenders,' who treat students to such caricatures of the science, as the specimen above quoted from the Peninsular Journal," &c.

After some hesitation we have come to the conclusion that it is due to the subject, to ourselves, and to the position we occupy, to so far step aside from the general rule we had marked out, as to examine with some particularity this " railing accusation."

Now let us enquire as to what is the teaching of Homœopathy on this point, and see whether or not we have caricatured the "science." We wish the above quotation of our former remarks critically observed and compared with the language of the authorities we shall adduce. We contend that however much Homœopaths may speculate respecting the causes, and the nature of disease, that in treatment, the symptoms or external manifestations, and those alone, are their guide. That if a particular pain manifested itself, or any other morbid sensation or appearance, symptom or group of symptoms were presented, without stopping to make special inquiries, (unless it were as a mere matter of curiosity or of general scientific interest,) as to the essential condition upon which that external manifestation—that symptom or group of symptoms depended, the true Homœopath would endeavor to select a remedy having entire reference to those symptoms, and which if given to a healthy person in full doses, would produce external indications or symptoms similar to those manifested.

From the fact that medicines are selected on the principle that they produce symptoms similar to those of the disease for which they are given, we should necessarily infer that these symptoms or perceptible manifestations were the sole guide; but Homœopathic writers have not left us to these inferences alone, however positive they may be. Hahnemann, the founder of the whole system—the discoverer of this pretended "universal law of cures," and who must be regarded as the very highest authority, is very explicit on the point in question. In the Organon, second American edition,

page 81, after dwelling at length upon the impossibility of discovering the causes and essential characters of diseases, thus repudiating as the merest speculation the whole of pathology—at least denying its useful bearing upon treatment—and denouncing as folly any attempt to direct remedies towards those causes and essential conditions, says :

“ The totality of the symptoms, this image of the immediate essence of the malady, *reflected externally*, ought to be the principal or *sole* object by which the latter could make known the medicines it stands in need of—the *only* agent to determine the choice of a remedy that would be most appropriate. In short, the *ensemble* of the symptoms is the principal and sole object that a physician ought to have in view in every case of disease—the power of his art is to be directed against that alone, in order to cure and transform it into health.”

Again, on page 83, he says—“ The expression of disease, *perceptible by the senses*, announces all the internal change, that is, all the morbid perturbations of the vital principle ; in short, it displays the entire disease.”

Again, page 84—“ Only that which is necessary for him to know of the disease, and *which is fully sufficient* for the purpose of cure, has the Lord of life rendered evident to his senses.”

Page 85 he farther, and if possible more explicitly confirms our position as to Homœopathic teachings, where he says : “ We ought naturally to conclude that there can be *no other indication* whatever than the *ensemble* of the symptoms in each individual case to guide us in the choice of a remedy.”

Still further confirmatory of our position, on page 87, speaking of the action of medicines, he says : “ We ought to rely solely on the morbid *appearances* which medicines excite in healthy persons, the only possible manifestation of the curative virtues which they possess, in order to learn what malady each of them produces individually, and at the same time what diseases they are capable of curing.”

Dr. G. L. Rau, author of another Homœopathic Organon, in a previous work as quoted by Hahnemann, page 81, says—“ The physician who engages in a search after the hidden springs of the internal economy will hourly be deceived ; but the Homœopathist, who with due attention seizes upon the faithful image of the entire

group of symptoms, possesses himself of a guide that may be depended on, and when he has succeeded in destroying the whole of them, he may be certain that he has annihilated the internal and hidden cause of disease."

Here, as by Hahnemann, the same doctrine is taught, that the symptoms—the external "image" of the internal disease, is alone to be regarded in treatment—or as we expressed it, that "diseases should be treated according to their symptoms, and not according to their nature and cause," &c. The only difference between our language and these authors is, that they speak of the symptoms as the proper guides, while we represented them as "variable and irregular."

We might quote further on this subject from the great leaders in the Homœopathic School, but it cannot be necessary. Who that has looked into their common works—*Jahr's Manual*, for instance, can fail to see that the whole affair, true or false—sensible or absurd, is a system of symptomology? Medicines are placed exclusively in connexion not with pathological conditions, such as congestion, inflammation, anemia, or plethora, but with special feelings or symptoms, the most fanciful and absurd often, which they are supposed to produce, and consequently remove. For example, opening to the first page of the above Manual, we put down at random, as we turn from page to page, some of the revealings: "Absence of mind, irresoluteness—remedy, *Alum.* Absence of mind with confusion of thought, *Cupr.* Makes mistakes in writing, *Natr. Carb.* Frequent vanishing of thought, *Ol. An.* Drops the tumbler when spoken to, *Hell.* On waking grinds his teeth, *Kal. Carb.* Fear of death, *Dig.* Sudden sadness while reading an interesting chapter, *Croc.* Vanishing of thought, *Mere.* Sense of intoxication immediately after dinner, *Bell.* Pain in the big toe, as if sprained, *Mosch.* Dreams about fights and murders, *Cale. Carb.*" Thus through a volume of over 1200 pages are supposed remedies set down as directed against symptoms—but in not a single case that we can find is an article of treatment directed against an essential pathological condition, or cause.

But Dr. Ellis, who is so profuse in his charges of misrepresentation, confesses essentially what we have been stating. He says, in the address—"In selecting a remedy to cure a given case of disease, we are to be governed by the totality of the symptoms; and

by the totality of the symptoms, we include everything which can be known in regard to the disease, even to the *cause* which produced it, (!) and mental symptoms, as well as variations from health of the senses—all pathological changes of structure, &c.”

Symptom, is defined by Webster, “a perceptible change in the body or its functions which indicates disease.” Or as stated by Harris in his late Medical Dictionary—“A perceptible change or alteration in the appearance or function of one or more of the organs of the body during the progress of disease.”

The term symptom, as understood by every intelligent medical man, signifies a deviation from the normal condition of an organ or function perceptible to the patient or to others, which indicates the presence of disease, and assists the judgment in forming an opinion of its seat and nature, and whatever else it is desirable to know respecting it.

Let us take a familiar example, a common case of colic, to illustrate the distinction between causes, pathological conditions, and symptoms.

A crude material is taken into the alimentary canal, or an impure secretion is present. Pain is produced, spasms occur; the countenance is distorted, the patient writhes—he feels nausea, perhaps vomits; his countenance is at first sunken and depressed, afterwards flushed, and his eyes suffused, &c. Now the *cause* of this state of things is the crude material or the morbid secretion—the unripe fruit or the superabundant acid in the stomach and bowels. The organs themselves are in a state of irritation liable to pass into inflammation. This is the *pathological condition*. The pain, the nausea, the contortions, the paleness, the suffusion, &c., are the *symptoms*. The distinction is most clear and palpable, and the ignorance or the effrontery which attempts to confound the cause and pathological condition with the symptoms, is past all ordinary bounds, and must be treated with contempt by all intelligent men. No such confounding of things, in their nature distinct, will pass.

In the case we have adduced as an illustration, the cause is more apparent than in many other diseases, but in all, the cause should be sought for, and if possible removed. Where it cannot be, the consequences must be combatted by the best means within our reach.

As we have shown, Homœopathy regards the symptoms as all

that is appreciable of a disease—as all that is necessary to be observed in the treatment, and the Homœopathic principle of cure consists in selecting such articles as would produce similar symptoms if given to a well person.

Instead of proceeding rationally, as every scientific physician would do, in the case supposed—regarding the symptoms in the light of witnesses to testify as to the cause and essential condition ; to remove that cause or prevent its injurious effects ; instead of giving an emetic or cathartic to evacuate the green fruit, or an alkali to neutralize the acid—or in case these could not be readily done, to give an anodyne to render the sensitive surface tolerant to the irritation, and relieve the patient of the suffering ; the Homœopath allowing the fruit or the acid—the cause, to remain, and regardless of the essential condition existing, if true to his “ universal law of cure,” his infallible *similia similibus curantur*, would proceed to the administration of articles supposed to produce symptoms similar to those existing. This is true Homœopathy, and not a caricature. If any in practice would do differently, in so far would they deviate from the “ universal law.”

We do not wonder that when exposures of this system are made, and the subject presented in a clear light its professors are ashamed of it, and resort to every subterfuge of evasion and denial to hide its deformities. We are not surprised that when the temptation to equivocation is so strong, that those who are habitually in the state of mind which we think practitioners of this school must be, will confound things that are distinct, and resort to assertions regardless of truth. It is the most natural thing in the world. The temptation is altogether too great for the virtue of the author of the address.

There are various other points in this address which if space would allow we might regard as proper to notice ; but the length of this article will preclude the possibility at present. We set out to defend ourselves from the charge of having misrepresented their system, and will leave it to our readers to judge whether we have not succeeded. Passages from some of the writers on Homœopathy may doubtless be found, which, like the passage from this address quoted on a former page, declare that causes of disease and pathological conditions must be regarded in the treatment, but this will not alter the fact that the great lights of the system teach differ-

ently, as we have shown, and that the true Homœopathic law of cure has reference to the symptoms alone.

The author enquires if we do not know that Dr. Henderson, a Homœopath, is at present a Professor of Pathology in the University of Edinburgh? We do; but we know further that Dr. Henderson does not teach Homœopathy in that school. He was Professor of Pathology before he became a Homœopath, and he is tolerated in the University only because the duties of his chair do not lead him to speak on the subject of treatment. It is alleged in favor of his retention in his position, that his heresies on the subject of treatment, will not interfere with his teaching of pathology.

The address states that had we even possessed the knowledge contained in any of the domestic works on Homœopathy, we would have been aware of the incorrectness of our statement. We would say to our readers that we have gone farther in our reading on this subject than those "domestic works" written for the ignorant in medicine, and from which all ideas on the true philosophy, or rather upon the bald absurdities of the system, are carefully excluded. We have been to the fountain head; we have learned what the pretended "universal law of cure"—what *similia similibus curantur* really means; and we have learned, too, what those who have read only the "domestic works" have not learned, that the quantity of fluid required to reduce a single grain of medicine to the higher dilutions, would constitute an ocean whose bounds would not be limited by the farthest planet in the solar system. We have indeed learned much more than we can here state. We have learned that the relation which this system bears to scientific medicine is one of direct opposition and universal negation; that there is all the difference between it and true medicine, that there is between German transcendentalism and Christianity; that it is an array of the fanciful against the real—the imaginative against the positive—the inoperative against the effective. It is in fact a crusade against common sense, and the wonder is that any are its dupes. But alas! in medicine as in religion, history proves that no absurdity is too great for human credulity.

In looking over the matter, we are however surprised that any considerable number of persons in our State have thought that this system, with all its glaring absurdities, (and we have now alluded to but a small segment of the circle,) was worthy of being incorporated into

our University; and that with its direct antagonisms to scientific and rational medicine—its total incompatibility with all such teachings, could possibly be harmonized into the same school. We are surprised that any could suppose that those who are striving with all the powers given them to teach in peace and with acceptance the true science of healing—who are presenting with faithfulness no exclusive dogmatic system, but all the different modes and means of cure which reason and experience have shown worthy of regard, will admit upon the same platform, and respect as a colleague and co-laborer, the representative of such a system. We are surprised that all should not have at once seen, what by the late action of the American Medical Association is now apparent, that the regular profession, knowing this antagonism, and understanding the importance of union and harmony in a school in order to render its teachings effective, would not extend their patronage to one where such harmony did not exist. That any right thinking men were in favor of such an attempted union, can only be accounted for on the ground that the subject was not understood.

Todd on the Nervous System, Consisting of Clinical Lectures on Diseases of the Brain and other Affections of the Nervous System.
By ROBERT BENTLEY TODD, M. D., F. R. S., Physician to King's Hospital. Published by Lindsay & Blackiston, Phila., 1855. pp. 311.

This is a plain, unpretending work of about 300 pages, and of a practical character. There are twenty lectures, the subject being divided according to pathological classification. The book makes no pretension to broad, original views, but simply to practical and descriptive excellence. There are a great number of sound common sense ideas respecting the means of diagnosis among these perplexing diseases—ideas which a majority of physicians do not attain to, and from which they would derive much benefit. The topics are illustrated by 77 cases.

“*An Appeal.*”

We call attention to the article under the above head, from the Secretary of the American Medical Association. Every Physician in the North-West is concerned in the matter.

University of Michigan.

The Medical College of this Institution has recently been improved by a coat of stucco, and by the addition of a splendid cabinet of Materia Medica to its museum.

Announcement of the Philadelphia College of Medicine.

The session of this Institution commences early in October.

Announcement of the Jefferson Medical College.

The next session commences on the 8th of October.

Animal Decomposition as the Chief Promotive Cause of Cholera.

By HENRY HEARTSHORNE, M. D.

This is a pamphlet containing an article originally published in the Medical Examiner. The design of it is to show that the chief cause of cholera is animal malaria. We suggest that inasmuch as vegetables, especially the cryptogamia, contain nitrogenous compounds quite similar to animal substances, it may not be possible to distinguish very accurately between the effects of vegetable and animal malaria at all times. It is true, however, that a distinction is *sometimes* evident, as for instance the remittent fevers of a purely vegetable origin are distinguishable at a single glance from the ship fever, which is produced by the effluvia arising from living bodies.

New Bookstore.

A new firm, under the title of Wilmot & Co., has bought the establishment formerly kept by A. B. Wood, in Ann Arbor. They have filled it up with a splendid assortment of books, which they sell at reduced prices. For Medical, Scientific and Classical works, no bookstore in Michigan can now compare with it. Gentlemen in any part of the State can now be supplied by this establishment with any work which is to be found in the country. Orders may be sent, and books received by mail, express, or in other modes. We recommend them to the patronage of our friends.

Vaccine.

We are frequently inquired of for reliable Vaccine Virus, and would inform our readers that we are assured it can be obtained at all times of E. L. O'Harra, Druggist, Chicago, by sending \$1 by letter. All such orders will be promptly responded to by return mail.

MISCELLANEOUS.

Catheterization of the Air Passages.—The New York Academy of Medicine has appointed a committee to re-examine the question, whether the probang and the tube, recommended by Dr. Green, really enter the air passages. After six months, they report in substance, that they find the introduction of a tube into the trachea possible, but failed in every instance with the sponge and probang. A minority report was however presented, which maintained that both operations were perfectly feasible. An effort was made to bring the Academy to a vote on the majority report, but failed, and the whole subject was laid on the table.

New Application.—A German lady, not very familiar with the English language, lately informed her physician that she had relieved her little son of pain by putting a “mustard plaster on the bottom of his soul”—(sole.)

Oleum Caninum.—A patient on whom the junior Editor of this Journal had operated for strangulated hernia, was troubled after his recovery with slight peritonitis, and afterwards with symptoms of adhesion in the iliac region, occasioning pain when he attempted violent exercise. The Doctor failed to remove the pain, and recommended time and patience as the best remedy. The neighbors, however, after the Doctor's departure, recommended “*dog fat.*” Accordingly the patient took three quarters of a pound of “*dog fat,*” and entirely recovered.

Ergot.—A French journal publishes certain conditions as contraindications to the use of ergot in labor. 1. Debility from the natural or pathological condition of the patient, requiring tonics. 2. An unusual distention of the uterus, requiring rupture of the membranes. 3. Rigidity of the uterine fibres from inflammation or congestion, requiring blood-letting. 4. Mental disturbance may suspend contractions, the cause of which should be removed. 5. Confined and highly-heated apartment, requiring ventilation. 6. Distention of the bladder, to be relieved by the use of the catheter. 7. Intense pain in the small of the back often interferes with effi-

cient contractions—to be relieved by bleeding and chloroform. S. Premature rupture of the membranes. Uterine contractions are oftener impaired by plethora than debility. Women suffering from the asthenic diathesis are apt to have rapid labors; and the tediousness of labor in plethoric habits is relieved by suitable depletion. Ergot rarely fails to act, and act favorably, upon the parturient female, when the system is in a condition favorable to the natural contractions of the uterus.—[Memphis Medical Recorder.

The Skin and Mucous Tissues.—Dr. Hitchcock, in the New Hampshire Journal of Medicine, after drawing a parallel between the anatomical structure of these tissues, and remarking upon the similarity of their diseases, deduces the following important pathological law: “That in a case of physiological excitement, or increased natural function of the skin or mucous membrane, the other is correspondingly diminished in function—whereas, when either is pathologically excited, the other is sure to take on the same kind of morbid action. This principle is fundamental, and should never be lost sight of in prescribing for cutaneous diseases. Rightly understood, it would not diminish confidence in the use of medicines, but would lead to a more careful investigation of the pathology of cutaneo-mucous diseases, and consequently to a more judicious, safe, and successful application of remedies.”

Rheumatic Ophthalmia.—Dr. Nott, of Mobile, in the New Orleans Medical News, says: “Few diseases give more acute pain than this, and all the common modes of treatment are tedious and unsatisfactory. Several years ago a patient applied to me, suffering intensely from this disease. I cupped, leeches, applied soothing poultices, anodyne applications, constitutional remedies, &c., without relief. While in despair, I one night spread some mercurial ointment on a rag, and laid it over the eye—the patient soon felt better, slept well for the first time during a week—next morning was much better, and recovered rapidly.” He adds, that mercurial ointment applied on the face invariably causes salivation.

Irritable Stomach.—In a London hospital this troublesome symptom, in pulmonary diseases, which frequently interferes with the taking of cod-liver oil, is said to be controlled by hydrocyanic acid and trisnitrate of bismuth—three minims of the former to ten grains of the latter, in a draught of mucilage and mint-water.

Lupulin.—This remedy is represented as a powerful anaphrodisiac, composer of the genital organs, and quieter of painful erections. It is sedative, with some tonic power, and anti-bleorrhagic. In a large number of cases of painful erection, dependent upon gonorrhoea, lupulin quieted the erethisms in four-fifths.—[Memphis Med. Recorder.

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NO. IV.

ORIGINAL COMMUNICATIONS.

ART. I.—*An Interesting Case.*

MINNEOWAH, M. T., Aug. 13, 1855.

MESSRS. EDITORS :

I have just been treating a very interesting case, of which I send you a brief report.

On the evening of the tenth of August, I was sent for in great haste to see Mrs. H., who, the messenger informed me, "had been bitten by a rattlesnake, and was all swelled up." I despatched the messenger for some brandy, and hastened on. Upon reaching the house, I learned that about half an hour previous, the lady, with her husband, was weeding in the garden; that she was sitting down, and suddenly jumped up and screamed that something had stung her upon the *privates*. Her husband thought little of it, and laughed at her for making so much ado about the sting of a bee. She continued however to be much excited, and went to the house, where upon looking in the glass, she discovered that she was covered with blotches, and her face was much swollen. She immediately declared that she believed she had been bitten by a rattlesnake. The family were alarmed, and sent for me. I found the

patient lying upon the bed, complaining of severe headache and excessive itching of the skin, which was covered with a *nettle rash*. Said she felt very warm, though her skin was cool and moist; her pulse was small, and about one hundred per minute; eyes blood-shot, tongue natural. The *labia pudendi* were enormously swollen, the tumefaction extending above the umbilicus. No wound such as must occur from the bite of a snake could be found, upon examination. In a few minutes after my arrival she began to be effected with faintness and nausea, alternate chills and flashes of fever, with cold sweats. I ordered, to wash her all over with salt and water, apply a poultice of wet ashes to the part stung, give her plenty of brandy and water—make her drunk if possible. After the poultice of ashes has remained on one or two minutes, take it off, wash the part thoroughly, and put on a poultice of pounded raw onions; continue the latter application until the swelling is removed. Under this treatment the rash soon began to disappear, the soreness in the affected part became less and less, and the swelling gradually abated. In two or three days the patient was able to attend to the affairs of the house.

In regard to this case, the question naturally arises—was the patient bitten by a rattlesnake, or was she stung by some poisonous insect? She was barefoot, and sitting down at the time of the accident, yet she felt no snake. If a rattlesnake was present it gave no alarm, which according to my observation it always does when disturbed. Moreover, no snake could be found, although diligent search was made for it shortly after the accident, neither could we discover any wound inflicted. The symptoms I suppose would be much the same, whether the poison was inserted by a snake or by an insect, and the treatment would not be essentially different. But what insect could produce such alarming effects in so short a time? I answer, that when we take into consideration the part where the injury was inflicted, we need not be surprised at the sudden appearance of nettle rash, and the supervention of nervous symptoms. All the symptoms which appeared in this patient might manifest themselves in a very susceptible person, from the *sting of a bee*, and to this cause I am inclined to attribute the effects in the above case.

Yours Truly,

J. C. NORTON.

ART. II.—*Case of Lithotomy.* By E. ANDREWS, M. D.

In May last, Joseph — was received into the Washtenaw County Poor House, then under my medical charge. He complained of a great discharge of ropy mucus with his urine, often blocking up for a few moments the urethral canal. On examination, I found great soreness over the region of the bladder, and all the evidences of chronic inflammation of that organ. There was no gravel ever passed, and no stoppage of the urine, except what resulted from clots of mucus. Having no sound with me at that visit, I ordered a series of blisters over the pubis, and other treatment adapted to a chronic inflammation of the bladder. He derived so much benefit from these measures, that I continued them, and neglected to sound him for some three weeks. At the end of that time I found that the improvement was not permanent, but that he relapsed entirely as soon as the blisters healed. I therefore passed the sound, and immediately struck a calculus which seemed to be above an inch in diameter.

There remained, of course, no other way but an operation, for which the patient was quite anxious. After a few days taken in preparing him by the usual regimen for such cases, I proceeded, with the assistance of Dr. Lewitt, to cut for the stone. I chose the lateral operation, proceeding in the usual manner. I made a moderate opening through the prostrate, which I dilated with the finger, and afterwards seized the stone with the utmost ease, and withdrew it. Further examination showed that there were no other stones or fragments present.

The stone was cylindrical, being one inch and one-tenth in diameter, and two inches and a half long. It appeared to be about two-thirds encysted, one end being smooth and solid, and the other rough and friable, with a ring of fresh coagulable lymph adhering around the line of junction between the rough and the smooth portions. It had a nucleus of some decayed animal matter. Prof. Douglass submitted portions of it to chemical analysis, and found it to be of the fusible variety.

The patient awakened from his chloroform without any recollection of pain, and walked to his bed. There was no hemorrhage except the momentary gush from the small transverse artery; the tissues around the wound seemed to close up by contraction with

more facility than usual. In 24 hours some of his urine passed in the natural way, and at the end of the third day every particle of dribbling from the wound had ceased. On the 7th day everything was entirely favorable, the granulation in the wound however, being somewhat slow. At this time I removed from the place, and the patient passed over to the care of Dr. Lewitt, since which I have not heard from him.

ART. III.—*Case of Attempted Suicide.* Reported by A. B. PALMER, M. D.

July 31st, 1855, 3 o'clock P. M., was called to visit N. M——, American, aged 37, of medium size, and good constitution; unmarried; occupation, foreman in a lumber yard. His habits were usually good, though he was subject to paroxysms of intemperance at long intervals, being abstemious with the exception of a few days in a year.

Found the patient in a somewhat heavy sleep, from which however he could be easily aroused to the intelligent answering of a single question or two, but into which he would again speedily and irresistibly fall. There was some degree of blueness of the countenance—pupils were contracted to a point, the muscles somewhat rigid, and the general aspect indicating the effect of a large dose of opium.

From himself and others, at the time and subsequently, the following history, which may be regarded as quite reliable, was obtained: In consequence of some *affectional* and pecuniary disappointments and annoyances, he had been indulging for some days previously in drink to the extent of moderate intoxication. On the evening of the 30th, about 18 hours before the above date, tired of life, and disgusted with the fickleness of fortune and woman, after having fortified himself with about half a pint of whiskey and the reading of several pages of Thos. Paine's strictures on the Prophecies, he swallowed *two ounces* of laudanum, obtained from one of our best druggists, and of the full strength of the U. S. Pharmacopœa; and to make his object more sure, had added to the draught something more than an ounce of a mixture of equal parts of lauda-

num, Tinct. Hyosianus, and Tinct. of Valerian, which he had previously on hand.

After taking the poison and fastening his door, he took to his bed, and was not seen until late the next morning, when he was found in a profound sleep, and described as having livid and swollen features. He could however at that time be partially aroused for a moment, and at these times was sufficiently conscious to resist interference.

A physician saw him, who prescribed an emetic of Sulph. of Zinc, but as he obstinately resisted all attempts at its administration, nothing was done before my arrival. As the poison had then evidently been absorbed, and the effect had so far diminished as to render it almost certain that a fatal result would not follow, no active measures of treatment were instituted. Strong decoctions of coffee and tea were however directed, and subsequently laxatives and nervines, as constipation, a foul tongue, and nervous symptoms resembling Delirium Tremens, were present. In a few days he had nearly recovered his usual health, looking upon life with rather more favor, though he regarded it in his case as something of a failure, as was certainly his attempt to end it.

It should be remembered that the opium, as is not unfrequently the case where much less is taken, produced retention of urine requiring the use of the catheter. The case possesses interest, showing the amount of laudanum which may be taken without fatal results. Two and one-third ounces at a single draught was undoubtedly taken and retained, as there was no evidence, (and a careful examination was made,) of the slightest vomiting or evacuation of any kind having occurred for twenty-four hours after.

It should be borne in mind that the patient had been using alcohol pretty freely for three or four days, by which, together with other causes, his nervous system was much disturbed; and he took a free quantity just before swallowing the laudanum. He also took at the same time one-third of an ounce of Tinct. of Hyosianus, which doubtless modified the effect of the laudanum. In that condition of the nervous system which exists in Delirium Tremens, Opium may be given in larger quantities than in the normal state, and some narcotics diminish the effects of others when given simultaneously.

The facts of this case are regarded as being worthy of record,

and its relations to Medical Jurisprudence and Therapeutics will be readily seen.

CHICAGO, Sept. 10th, 1855.

ART. IV.—*Errors in the Code of Medical Ethics.*

The confusion of ideas prevailing on the subject of Medical Ethics, leads the writer to request the attention of the Profession to this topic, with the hope of leading to a more reasonable estimate of the great principles of right, which are set forth in our code, and a less servile attention to its mere letter and mode of expression.

It is with undisguised disgust and aversion that one perceives in very many physicians no higher idea of Medical Ethics, than that it is a system, not of principles based on the immutable truths of morality and right, but of arbitrary enactments, whose authority is derived from the National Association.

They view it as a compact for mutual benefit, as the charter of an organized *clanism*, all whose provisions are to be interpreted *on clanish prinaiples*. This narrowness of view exists to a considerable extent among practitioners, and is viewed alike with disgust by the public, and abhorrence by high minded and honorable physicians.

Before I proceed to the special instances of this abuse, I wish to lay down this law, which none will dispute, viz: *Ethical principles exist in the nature of things, and do not derive their authority, from any organized body.* The laws of right and of common sense are from eternity. They run through every occupation and pursuit of life, and their application to regulate each individual profession, constitutes the code of ethics of that profession. Consequently ethical rules are not *made*, but they *exist*. If there is anything in our code that is *created* by the National Association, it is false, and of no obligatory force. It is a *clanism*, which shuts out the sympathies of our fellow men, and obstructs our connection with the great, beating heart of humanity.

Let it be borne in mind then, that the action of the National Association was not to *create* or *enact* a code of ethics, but simply to state in a condensed form, what they believe the duties, privileges,

and obligations of physicians to be in the nature of the case, and to appeal to all honest and decent men, to stand up to these plain rules of honesty and decency. I for one voted to adopt the national form of the Code in our State Society, not because I considered it free from all defects, but because I considered it very good, and, its defects could be easily remedied as soon as we could get the attention of physicians turned to them. From these remarks, the reader may gather my deliberate opinion that God, and not man, has enacted our ethical principles, and he who wilfully disregards them will merit not only expulsion from professional fellowship, but whatever dread penalties the Tribunal of the Eternal holds in store for those that despise his law : therefore let none accuse me of making light of our Code.

Yet there are some faults in the details of the Code, as expressed by the Association, and also some faults still worse in the exaggerated interpretation given by the profession to its language.

In chapter 2d, article 1st, we have the following section :

“Sec. 3. It is derogatory to the dignity of the profession, to resort to public advertisements or private cards or handbills, inviting the attention of individuals affected with particular diseases—publicly offering advice and medicine to the poor gratis, or promising radical cures ; or to publish cases and operations in the daily prints or to suffer such publications to be made—to invite laymen to be present at operations—to boast of cures and remedies—to adduce certificates of skill and success, or to perform any other similar acts. These are the ordinary practices of empirics, and are highly reprehensible in a regular physician.”

By this section, the Association intended to hold in check the bombastic tendencies with which certain members of the profession are afflicted. So far, so good. These tendencies should be held in check with a right strong hand ; but the compilers undertook the hopeless task of enumerating singly all the modes in which bombast displays itself—forbidding the *external act*, not the evil principle which lay at the bottom. Some of these very acts performed under proper circumstances, and with a right motive, are entirely justifiable. Thus, for “a layman to be present at an operation,” one would think by the language of the section to be a heinous offense against propriety, whereas every one knows in country places it is almost impossible to perform any serious operation without their assistance, and that even where that is not required,

the moral support which a patient derives from the presence of a resolute non-professional friend, is often of the utmost advantage to the success of a case. To "invite a layman" to be present, under such circumstances, is perfectly according to ethics, the Code to the contrary notwithstanding. Again, it often happens that an intelligent, sensible man, desires as a matter of laudable curiosity, to add to his general intelligence by witnessing the mode of proceeding in surgical operations. In such cases, provided it is agreeable to the patient, it is perfectly proper to invite him; nay more—to refuse his request would tend to give an impression that there was something in surgery which the profession were afraid or ashamed to have made known. That "peculiar reserve maintained towards the public in regard to professional matters" which the code recommends, (ch. 2, art. vi, sec. 2,) tends to fling around the surgical chamber all the horror of an inquisitorial dungeon, where unknown tortures are inflicted secure from the eyes of "laymen." It is a matter of regret that physicians are so unaccountably blind to the existence of this impression in community. I conclude therefore, that to "invite a layman to be present at an operation," is only reprehensible in point of morals when he is invited for the purpose of having him blow the surgeon's trumpet afterwards. I suppose this was the thing aimed at by the compilers of the Code, but why they did not come directly to the point and say what they meant, is inconceivable to me.

Again, "public advertisements, or private cards or handbills, inviting the attention of individuals affected with particular diseases." This clause was aimed at such puffing and blowing as is exhibited by the New York Consumption Quacks, and by the whole herd of Cancer Doctors, Venereal Doctors—*et id omne genus*—men who without any proper study or preparation take to some of these specialties, and by bombastic advertisements and other tricks hoist themselves into practice. Against these quacks, I suppose the compilers of the Code had a very proper indignation, but by a most ludicrous confusion of ideas, they imagined that the way to exterminate such quacks, who are outside of the profession, is to prohibit regular, competent physicians from devoting themselves to special branches. Now I assert that if a regularly educated physician, who has acquired a full knowledge of the profession, chooses to withdraw from general practice for the purpose of concentrating

his attention upon a special branch—as, for instance, diseases of the eye—it is his right to do so, and to announce the result in a simple, unassuming manner, both on his card and in an advertisement. The authority of the Code is constantly quoted in opposition to this, but to no purpose, for the procedure itself is entirely right, and the National Association has no authority to legislate new rules into existence. Any attempt to do so is to be resisted as an infringement of the liberty of the practitioner.

All this confusion in this and other sections of the Code arises from the attempt of the compilers to enumerate the *specific external acts* which a physician ought not to do, regardless of circumstances and intentions. They should have struck at the principle involved, and not at the acts, which may or may not spring from it. They probably expected to give greater precision to the rule, and by specifying the particulars, prevent evasion, but after enumerating eleven or twelve, they seem to have come tardily to the conclusion that the list might possibly be rather long if they included every form of bombast, wherefore they broke off abruptly, and added—“*or any similar act,*” leaving, after all, the vast majority of professional sins of this nature unmentioned.

Perhaps the worst feature in the whole section, is the reason assigned why physicians should avoid such actions, viz: “These are the ordinary practices of empirics, and are highly reprehensible in a regular physician.” That is to say, these things are reprehensible not because they are wrong, but because “they are the ordinary practices of empirics.” It is of no consequence what empirics do or do not do; the ethical question is, *What is right?* It is time that we set our faces against this prevailing tendency in the profession to make opposition to quacks, instead of moral rectitude, a test of propriety. This tends to make us looked upon by the community as intolerant and bigoted, and we are very sorry to see such a paltry test of ethics put forth with the sanction of the National Association. When such a body as that gravely bases its prohibitions on the “practices of empirics,” without even alluding to moral obligation, it naturally leads intelligent men to suspect that our hostility to empirics has blinded our eyes somewhat to truth and general principles, and consequently that our denunciations of the various quack systems are the result, not of investigation, but of prejudice and hatred. In a word, that we are unsafe judges of

medical truth. The prevalence of this impression is such as ought to receive the serious attention of all who care for our standing before the world.

When the people shall perceive that the easy rules of common sense, common courtesy, and common right, are the laws which regulate all our conduct and etiquette, we shall speedily find them siding with us as powerful allies, to expel delusion and falsehood from their midst, instead of looking so coldly and inactively on. To assist in that desirable result, I hope that at the next meeting of the State Society, a committee may be appointed to revise the Code of Ethics, so that *all parts* of it may present the same simplicity and beauty of principle which the greater portion does at the present time. X.

ART. V.—*Fevers of 1855 in Detroit and vicinity.* By. E. P. CHRISTIAN, M. D.

The ordinary autumnal fevers, which commonly do not make their appearance to any great extent prior to the autumnal equinox, this season made a sudden irruption both in the city and surrounding country, in unprecedented numbers, as early as the middle of August. Last year, their general prevalence was as late as October. The rationale of this variation doubtless may be observed in the sensible as well as in imperceptible atmospheric changes. The month of July was very rainy, and was followed by a very dry period of several weeks; and not only was there this change in the hygrometric condition of the atmosphere, but an equally sensible change in its thermometric condition, particularly in the advent of cool nights, contemporaneous with which these fevers made their appearance. Nor has this been the only difference observable—their earlier appearance than usual. They have I think, manifested some peculiar characteristics, indicating an unusual element in the ordinary miasmatic fevers, or at least exhibiting modifications suggestive of a duplicate cause.

There has been the usual amount of uncomplicated simple intermittents, speedily yielding to ordinary remedies, and the more severe types of its congeners from the mild remittent to the more ob-

stinate continued form of malarious fever. The modified form has been manifested in some one of the following order and combination of sequences. Commencing as an ordinary intermittent, with distinct and regular paroxysms, for some days, and then passing into a continued form, with pungently hot skin, scanty urine, deranged and offensive alvine secretions, tongue brown and heavily loaded, or red and scored transversely, skin presenting the purple stasis of the capillary circulation, about the arms, neck and chest, distinct from the blueness of congestion, and in some cases, dry bronchial cough with some degree of pain, but not acute; or else exhibiting the remittent type throughout, in many cases amounting almost to an intermission, but with most of the above symptoms continuing. These cases have generally been the result of neglected or badly treated remittents, and in cases presenting at the first, a red tongue, with tenderness in the epigastrium, and nausea, the application of a blister has apparently determined from the severer types to a mild and speedily convalescing form. Nor has the efficacy of blisters been limited to these cases alone, nor has it been limited to that extent, of determining a milder form. In mild cases with heavily coated tongue, but with no redness or creases, and with no epigastric tenderness, its application has not failed at once to mitigate all the symptoms, and convalescence has been marked from that period. Further, in simple intermittents, it has broken the train of symptoms, so that there has been no subsequent paroxysm, without any febrifuge being given.

To exemplify these differences in form, and the results of this treatment, we will here detail a few cases, from a great number, both in private practice, and coming under our observation in St. Mary's Hospital.

CASE I.—W. P. called at my office, Aug. 9th, to get a prescription for the ague. Had daily paroxysms for several days, the rigors however not well developed; but little functional disturbance, and after the subsidence of the paroxysm has felt quite comfortable. There being no contraindication, prescribed Quinine liberally, with alteratives, until the paroxysms were broken, and then to be continued in smaller doses for several days. Aug. 15th, not having seen him since I prescribed, was called to see him at his house. Found him with high fever, skin hot and pungent, presenting a purple shade about the neck, breast and fore-arms. Tongue brown,

no tenderness in epigastrium, but little nausea. Urine thick and scant, motions of the bowels not too frequent, but the discharges brown and watery, some bronchial irritation, but no expectoration with the cough, and with distinct morning remissions of the fever. Prescribed quinine, Morph., and Hyd. C. Creta, in diaphoretic and alterative doses, and occasional doses of Spiritus Ætheri Nitrici. Remained much about the same up to the 20th, when proper diaphoresis occurred, with considerable depression of the temperature of the skin. There was copious expectoration of frothy mucus, (so much so that the patient thought himself salivated,) and the urine became clear and more copious. This state continued about five days, when the tongue commenced to clear, and there was speedy recovery. I now think, had I placed a blister over the organs supplied by the solar flexes, at the commencement, my patient would have had nothing more than an intermittent, yielding to that and the first prescription.

CASE II.—Francis M., sailor. Entered Hospital Aug. 18, sick eight days with an intermittent; fever returning each afternoon, and preceded by pains in the joints, but no rigors; secretions but little deranged; tongue slightly coated. ℞. Calomel gr. iii; Cornin gr. v. twice; 19th, repeat. 20th, for the first time had a hard shake, succeeded by high fever. 21st, the same condition. 22d, bowels have moved freely—in other respects the same. ℞. Cornin x. gr. twice. 23d, no return of chill, but considerable fever; tongue has become red, and vomits occasionally. Apply blister to epigastrium and continue Cornin. 24th, no fever. Improved very fast, and left hospital in a few days.

CASE III.—Jas. L., sailor. Entered Hospital Aug. 25, sick eight days with an intermittent, having a daily regular paroxysm; tongue heavily coated. Directed a blister to epigastrium. 26th, no return of paroxysm; bowels costive. ℞. Calomel, gr. v; Cornin, gr. v. 24th, bowels moved—feels quite well. Remained a few days under tonic doses of Cornin, and left apparently quite well.

We will not spend time in detailing more cases. These are fair examples, and from them we may draw our inferences. The first case is chosen to show the tendency of the intermittent to verge into a typhoid type, when neglected, and is one occurring in private practice, in comfortable circumstances. The second illustrates the

favorable action of the blister in a case becoming continued, even when no decided indications for its use was offered, from congested condition. The third illustrates its beneficial action in an intermittent, with no indication of the same kind, for its use.

Now we are by no means inclined to advance the opinion, that blistering is a specific in these fevers, or that it is necessary in all cases, or even that it will be sufficient without other treatment, in the great majority of cases; still the advantages derived from it in a large number of cases, even when no indications existed of more than functional derangement of the epigastric organs, have been such as to leave no doubt of its great utility in such cases. This may doubtless be accounted for on other rational grounds, but we will nevertheless offer an hypothesis, perhaps vague, but which suggested to us its general application in these cases; and this will lead us to the consideration of the pathology of the fever.

Regarding our ordinary typhoid fevers as a modified and aggravated form of malarious fever, or as a hybrid form, resulting from an impression on the nerves of organic life, disordering the functions of the secreting organs; and of an animal poison, in the retained effete material, in consequence of this derangement; we expected to find the greatest amount of nervous derangement in those centers supplying the organs principally disordered. The stomach, liver and spleen are supplied by the solar flexus, which is situated behind the stomach. Now may not an epispartic applied over this region, exert a modifying influence on this center of nervous supply to these organs, as well as directly upon the organs themselves?

In regard to this theory of the nature of typhoid fevers, a full explanation of it may be found in a paper by Henry T. Campbell, on the nature of typhoidal fevers, in the Transactions of the Am. Med. Ass. for 1853; also in a paper by Z. Pitcher, M. D., on typhoid fevers, in the Peninsular Journal of Medicine, for Nov., 1853.

The influence of atmospheric changes upon the nervous system, is witnessed every day, giving rise to neuralgia, sciatica, and various nervous complaints; and also in the commencement of fevers, in the aggravating pains, the pricking and numb sensations in the extremities, but these are so common as to require no remark. Is it not plausible that a more violent impression may in like manner

disorder the functions of this nervous system of organic life, as a milder one disorders that of sensation and motion.

There is a complication usually present in typhoid fevers, and occurring in the present form, which merits particular consideration. This is the bronchial irritation simulating bronchitis, and in aggravated cases, the morbid condition extending we suppose, to the air cells, offering indications of obstruction to their functions. What is the pathological condition? Neither its termination, the treatment found proper, nor the correspondence of symptoms generally, indicate an inflammatory condition.

Dr. Pitcher, in the paper mentioned above, having remarked upon the congested state of the skin of the hands, neck and chest, says—"From the symptoms, as well as from the recognized existence of cutaneo-intestinal sympathies, we believe that a similarly congested state takes place in the mucus membrane of the lungs and alimentary canal, owing no doubt to a paralysis of the nerves of organic life."

Dr. Hitchcock, in the *New Hampshire Journal of Medicine*, (see last No. of *Penin. Journal of Medicine*,) deduces the following pathological law—"That in a case of physiological excitement, or increased natural function of the skin or mucus membrane, the other is correspondingly diminished in function—whereas when either is pathologically excited, the other is sure to take on the same kind of morbid action." Now if the same morbid condition exists in the pulmonary mucus membranes as in the skin, which we think may be fairly inferred, it gives rise to an interesting and important inquiry in regard to what may be the consecutive phenomena from the continuance for any length of time of the impediment to their proper functions. In the alimentary canal, where we may infer the same condition exists, if unrelieved in the early stages, we have the dothinentoritis of the later stages, giving origin to its severer symptoms. How common is it that we find organic pulmonary disease first manifesting itself in the course of, or consecutive to, a severe attack of fever.

Since the foregoing was prepared, I have received the following notes of cases from Dr. Batwell, occurring in his practice, and showing the decided advantages of the early application of a blister in remittents and intermittents:

Aug. 17th. Was called to visit a family in Greenfield, and found four of them laboring under remittent. Applied a blister to two of them, over the stomach, and ordered the following mixture for the four :

R. Sulph. Quinæ,	gr. xx.
Sulph. Acid. Dil.	g.s. Tr.
Cinchonæ Syr. Rhei,	aa. ℥ij.

Tablespoonful three times a day.

19th. Found the two to whom I applied the blister, much improved—tongue and secretions natural. The others no better ; fever still high, with headache, nausea, and thickly coated tongue. There was no evidence from pressure or redness of the tongue, that gastric irritation was present. Applied a blister to each, and the next day both had a decided chill towards evening, succeeded by fever, which soon passed off and left them feeling quite well. 22d, all had a chill, with accompanying fever, which passed off with copious sweating, and there has been no return of any unfavorable symptom since.

CASE 2d. M. F. had a chill and subsequent fever ; no gastric symptoms present. Applied a blister, and ordered quinine and Dovers Powder. No return of paroxysm since. Two days afterwards the wife of the above was attacked in a similar way. She took of the medicine prescribed for her husband, but with no good effect. Saw her four days subsequently, and ordered a blister, upon which she improved immediately, and has continued well since.

ART. VI.—*Case of Trismus, occurring in an Adult.*

MESSRS. EDITORS: The following case lately occurred in my practice ; and as I think it will prove of some interest to your readers, I transcribe a brief account of it for you. Owing to want of previous history of the case, the etiology was not very clear ; but from the entire absence of any discoverable transnatic lesion, the loaded state of the lower bowels, and the character of the egesta from the stomach, I was led to ascribe the case to the combined effects of irritating ingesta, and long continued constipation, acting upon the mucus membrane of the alimentary canal.

Wm. Gibson, aged 28; occupation, sailor. Was taken unwell Sept. 3d, 1855, about 11 A. M. Retired to bed, complaining of general indisposition. About 7 P. M. was attacked with vomiting of various indigestible substances, such as the cores and skins of apples, raw meat, and pieces of potato. I saw him about 10½ P. M. He then lay in a comatose condition; pupils readily contracted to the stimulus of light; pulse about 80, full and weak; breathing stertorous; skin warm, and bathed in a copious, clammy perspiration; strong tonic contraction of the temporal and masseter muscles, setting the jaws so firmly as to defy the efforts of a powerful man to open them. No traumatic lesion discoverable on a most rigid examination of the body and limbs.

The treatment pursued consisted of copious enemata of Ol. Terbinth, Ol. Ricini, Molasses and water, and Salts and water; the warm bath; dry cups to the nape of the neck and spine, and sinapisms to the abdomen and spine. I had none of the anæsthetic agents at hand, and therefore was obliged to dispense with their valuable assistance. No amelioration of the symptoms took place, and the patient died within five hours from the time I saw him.

Since meeting with the above case, I have been informed of a similar case which lately occurred in the practice of my friend Dr. Bevan, of this city. In his case recovery took place, the treatment being similar to that mentioned above.

With much respect, Yours,

WM. VARIAN.

CHICAGO, 8th Sept., 1855.

[Having while in practice in a highly miasmatic region, not unfrequently observed similar symptoms to those described in the foregoing communication, occurring during paroxysms of intermitting fever, the idea of *malaria* having something to do with this case is forcibly suggested. It seems to us most probable that the tonic spasms and coma were the result of congestion of the nervous centres produced by a miasmatic influence acting in connexion with the irritating food and constipation referred to by our friend Dr. V. Though there is but a moderate miasmatic influence in Chicago, it is intense in some of the ports which sailors visit, particularly those engaged in the lumber trade.—Eds.]

ART. VII.—*Case of Heart Disease—described in a Letter from Prof. Z. PITCHER, of Detroit, to Prof. A. SAGER, Univ. of Michigan.*

TO PROFESSOR SAGER :

I send you herewith, for preservation in the anatomical museum of the University, a specimen of morbid structure, the pathography of which, is as follows :

In September, 1853, I was consulted by Mr. —, who stated that he had not been well for several months—he could not say precisely how long—and added, that he had absented himself from business on that account, and had made an excursion to the mining region of Lake Superior, from whence he had just returned, without having obtained the relief he hoped for. He complained of no pain, yet was not perfectly at ease, unless he assumed a recumbent position. Slight exertion caused a sense of fatigue, want of breath, and a consciousness of the action of the heart. When at rest, sudden bursts of perspiration would take place, such as females are liable to at the critical period of life.

The pulse, at this time, was over one hundred per minute, small, hard, and perfectly regular. At the left wrist it was less distinct than at the right, a disparity that continued to the end, and was participated in by the venous system, as the circulation in the veins was constantly more active in the right arm and right side of the neck than it was in the left. The respiration was not hurried in proportion to the movements of the heart. Percussion did not indicate any embarrassment in the lungs, although there was then for a few days, bloody expectoration, followed, after venesection, by a copious muco-purulent secretion, which ultimately gradually entirely subsided. Auscultation proved the pervious condition of both lungs, and the presence of a mucus rale in the right one.

The heart then became the object of special attention. It gave out no abnormal sound. The systolic and diastolic sounds were clear, distinct, (the former sharp,) and followed each other with unvarying regularity, from which they never departed. The impulse was too strong, but not perceptible over an extraordinary space, and the ventricular contractions seemed to take place in less than normal time, as if the organ were impatient of the presence of its contents. At this time, the external jugulars were constantly

distended, and the right internal jugular vein pulsated quite distinctly.

There being no irregularity in the *movements* of the heart, no rasping or blowing sound, no extraordinary quickness in the contraction of the radial artery, and nothing of the volume and force in the pulse which accompany hypertrophy of the left ventricle, I came to the conclusion that my patient was suffering from *endocarditis of the right side of the heart*, and that the signs of hypertrophy could not be accounted for by the detection of obstructive disease of the valves, or the existence of aneurisms in the vicinity of the heart.

After venesection, counter irritation, the use of blue pill, Iodide of Potash and Tincture of Digitalis, under dietetic restrictions, he was put upon the lowest amount of vegetable diet that would sustain existence without inducing a sense of exhaustion, incompatible with comfort. This plan was followed up for four months, before and at the end of which time, the pulse, when the patient was at rest, became soft, and beat from eighty to eighty-five times per minute. This restrictive system of diet was departed from very cautiously, so that Mr. — remained tolerably comfortable till late in July, when œdema supervened. This was removed by digitalis. There was nevertheless an increasing fullness about the head, and a stronger pulsation in the jugular veins.

On the 20th of August apoplexy took place. He emerged from that condition after venesection with loss of language—not the power to speak. This attack was followed by copious bloody expectoration. From this time he never breathed as freely. The pulse increased in frequency, but not in force or volume at the wrist. The impulse of the heart grew stronger, and agitated the body. Another attack of apoplexy occurred on the 1st of November, followed by the same events. Having the precursory signs of another attack on the 6th and 7th of December, he was bled again to a small extent, but paralysis of the left side nevertheless took place. Œdema followed the paralysis very suddenly. The indications of suffering every way increased. The abdomen became tympanitic, the right half of the chest much elevated, the breathing more laborious, and the motions of the heart very tumultuous. From this state of suffering he was relieved by death, on the 8th of Dec., 1854.

Sectio Cadaveris.—On puncturing the chest, preparatory to the removal of the sternum, air rushed from the right side of the thorax. The right lung was apoplectic for the most part, and flattened by atmospheric pressure. The left one looked like a piece of mosaic, rendered so by the distinctness and number of the points at which the extravasation took place.

The state of the vascular centre is shown by the accompanying preparation. From an examination of it, I hope you will be able to show how a clearer diagnosis could have been made.

Very Truly Yours,

Z. PITCHER.

DETROIT, Dec. 10th, 1854.

The serious import of all organic heart affections, the obscurity that still rests upon some points, the difficulties of their investigation, and consequent discrepancies among our ablest writers, renders the faithfully recorded history of these affections peculiarly interesting and valuable. The anatomical characters of the morbid specimen alluded to in the letter were carefully inspected, with the view of referring the phenomena as far as justifiable to their physical causes. Placing the organ in a well adjusted balance, it was found to weigh a few grains more than twenty-one ounces, proving at once a great degree of hypertrophy, the standard weight varying according to Meckell, Cruveilhier and Lobstein, from eight to ten ounces in a male of middle age and size. Covering the right ventricle, and extending over a part of the right auricle, there existed a layer of adipose tissue, which in some points exceeded a line in thickness, but did not appear on naked eye observation to be intermingled with the muscular tissue of the organ. On making an incision into the cavities, they were all found to be dilated, but in different degrees; those of the right side much more than of the left. The thickness of the parietes of the latter were about uniformly six lines, which according to the careful measurements of Bizot, is slightly above the average normal thickness, but when regarded relatively to the dilated cavity, must be admitted to be excentrically hypertrophied. No change was detected either in the color, consistence or thickness of the endocardium; the mitral valves, although a little more opaque than normal, had lost none of their flexibility, and the muscoli papillares and chordæ tendineæ

were unchanged. The mitral orifice being four inches in circumference, corresponded with the measurement of Bizot, and although exceeding by six lines the statement of Cruveilhier, was yet completely closed by the mitral valves. Near the apex, and connected with the parietes by several small filaments that passed between the columnæ carneæ there was observed a polypoid concretion of an ovoid form and smooth exterior, of the size of a large filbert, and attached only by the smaller end. An incision disclosed a cavity containing pyoid matter of a reddish-yellow color, and liquid consistence. No lining membrane separated the contents from the parietes of the concretion. In the left auricle no change was observed, but an extreme attenuation of the walls for a considerable portion of their extent.

The walls of the right ventricle at the base were about two lines thick, from this point gradually attenuated to half a line about the middle of the cavity. The dilatation of this ventricle was therefore evidently connected with atrophy in its walls. The lining membrane and valvular structures were sound, but the auriculo-ventricular orifice measuring five inches and 3 or 4 lines, and exceeding the normal aperture nearly an inch, was sufficiently dilated to permit the active regurgitation to which the general venous congestion, the jugular pulsation and the cerebral apoplexy was chiefly referable. Besides several smaller polypoid bodies also containing pus near the apex of the ventricle, a broad, thin, ribbon-like fibrous band extended from the columnæ carneæ around the papillary muscle and tendon of the valve, over which it passed, and was attached among the muscoli pectinati of the auricle. Its tension was apparently sufficient to prevent the valves from rising to close the orifice. Whether the sufferings of the patient, which during the latter months were rapidly augmented, was due in some measure to this additional obstruction is uncertain, as the period of its formation cannot be definitely determined, but the form, structure and attachments appear to justify a belief in its early formation.

But if the cerebral apoplexy was chiefly the combined result of the tricuspid regurgitation, and the hypertrophy of the left ventricle, as the researches of Hope, Bouilland, Walshe and Blakiston sufficiently prove, should we not also admit with Chambers and others the influence of a fatty degeneration of the cerebral capillaries, which the adipose hypertrophy of the heart, and general

systemic condition render very probable, although not verified by inspection.

The simultaneous occurrence of pulmonary apoplexy cannot indeed be accounted for by the operation of the same mechanical causes, as neither mitral regurgitation nor right ventricular hypertrophy existed. Was not the congestion of the pulmonary capillaries here due to the imperfect aeration during the convulsion, aided by the feeble action of an atrophic ventricle?

It is an enquiry of much interest connected with the diagnoses of these affections, to determine the source and origin of these pus bearing concretions, and several hypotheses more or less plausible have from time to time been advanced to explain this remarkable fact. But as these have been discussed by Cruveilhier, Hope, and others, it seems unnecessary to dilate upon them here. Suffice it to state, that as they are now admitted to possess a very strict analogy with the pus-bearing coagula of the veins in cases of so-called suppurative phlebitis, they probably also recognize a similar if not identical cause. Mr. Henry Lee, as is generally known, after repeating the experiments of Cruveilhier and Gaspard, and closely investigating the results, has in his prize essay quite conclusively shown that they originate from the coagulating power of pus upon the blood, thus guarding the system against the fatal effects of purulent toxæmia. Whether this theory of their formation is strictly applicable to the case in question we are not in possession of the requisite data to enable us satisfactorily to determine.

A. S.

SELECTIONS.

[From the Philadelphia Med. and Surgical Journal.

On our Indigenous Medical Flora. I. Lobelia Inflata. By ABRM. LIVEZEY, A. M., M. D., Lumberville, Pa.

As a professional body, we have, hitherto, allowed prejudice to blind us against certain remedial means, and caused us to discard curative agents, because used mainly by empirics, or first intro-

duced to the notice of the profession in the practice of charlatans.

We flatter ourselves, however, that a better day is now dawning,—that a laudable spirit of inquiry and progression is awake,—that we are willing to look abroad over the wide domain of nature in order to ascertain whether any *good thing* can come out of any other remedial means than those which have stood the *boasted* “test of 2000 years,”—in fine, that we are willing, generally, to accept as truth the Horacean precept, *fas est ab hoste doceri*.

Of all our indigenous articles, possessing, undeniably, active and valuable properties, there are none, perhaps, that the profession has been slower to examine and receive as a remedial agent than the lobelia.

Imbibing the precept inculcated by Prof. Mitchel to his classes, that *facts* or actual “knows,” instead of the usual “thinks” or “supposes,” are always valuable and acceptable to the profession, I shall be guided thereby, and state nothing but what I positively *know* from personal experience.

The lobelia inflata, as a therapeutic agent, could very profitably be treated of under three general heads: In (1) Medical; (2) Surgical; and (3) Obstetrical practice. But to embrace the whole subject in a single disquisition, for a Medical Journal, would, in a *manual labor* point of view, be truly a *magnum opus* for one constantly engaged in the turmoils of country practice.

Therefore, I beg leave to call the attention of the profession to its therapeutical application in the practice of the accoucheur,—presuming that its uses in the other departments of medical science are better known. When the process of parturition is about to take place, the *enceinte* is not unfrequently subjected, for several hours, to false pains, of a spasmodic or neuralgic character, which are harassing and exhausting and fruitless. Now, a large enema of the infusion of lobelia (dr. i-ii ad O i) retained in the rectum for 10 or 15 minutes, will speedily arrest these pains if *untimely*, but if to *full-term*, it will render them regular by allaying spasmodic irritation, and efficient, causing a dilatation of the os uteri, by its relaxant powers, and thus hasten delivery without danger, and consequently abbreviate suffering.

When enemata of lobelia are resorted to for the foregoing purpose, or in the commencement of labor, we very seldom hear the female complain of her head; and again and again have I relieved the head of severe pain, warded off threatening convulsions, and induced speedy delivery by these enemata. Instead of using the lancet, then, when the parturient female complains of her head, or says she cannot see aright—symptoms fearfully ominous of approaching eclampsia, according to authority, let the accoucheur resort to enemata of this character, repeating them every 30 minutes if the case demands them, instead of resorting to the lancet on every occasion, whether the patient be weak or strong, anemic or plethoric; before, too, we know how much blood she is going to lose by the natural channels.

These enemas unload the rectum of its irritating contents, and act revulsively by "changing the field of excitement," whilst a sensible relaxing influence pervades the whole economy.

Again, in cases of rigidity of the perineum, lobelia enemata, acting by contiguous sympathy, are invaluable. How often is the accoucher obliged to remain at the bedside of the suffering one, and witness almost incessant and heart-rending throes for hours together, without any sensible advance of the head, owing to the resistance of powerfully developed and rigid perineal muscles.

Let him no longer sit listlessly by, administering *teas*, or exhorting patience to a woman in such a travail of agony, when a syringe can be obtained, and a stalk of lobelia procured from the shop, the garret, or the field.

Several times have I been called upon, with the request to bring the forceps, by my medical brethren, in order to deliver the child, when, upon examination, I have found the head resting against an unyielding, iron-bound perineum, a position which it had maintained for two, four or six hours, notwithstanding the *warm teas*, *fomentation and patience*, and a tenesmic force, under which the bedsteads were creaking. And yet how speedily was delivery effected in all these cases, by the aid of enemas, of lobelia infusions, or by stirring a teaspoonfull of fine lobelia into a half pint or more of warm mucilage of elm.

I cannot be deceived as to the relaxing power and consequent use of this plant in obstetrics, for I have not treated barely two or three cases thus successfully, so as to mistake the effect or result as a *post hoc*, but having promptly relieved dozens when the greatest rigidity prevailed, I am sure that they were *propter hoc* consequences.

[TRANSLATION.]

[From the London Quarterly Journal of Microscopical Science.]

On the CELLULOSE (in animals) QUESTION. By R. VIRCHOW, Archiv. f. pathol. Anatomie, ü. Physiologie, &c., vol. viii., H. 1, p. 140.

Since my former communications respecting the substance met with in the human body resembling vegetable cellulose, I have taken much pains to ascertain more precisely its nature. In now recurring to the subject, it is not that I have been altogether successful in the inquiry, but rather because I perceive that it is becoming more and more involved in confusion. There are some even who, whether from superficiality or for other reasons, appear

to regard what I have said,—as I believe with sufficient distinctness—as unsaid, and have busied themselves in associating with the amyloid bodies described by me, bodies of all kinds only *morphologically* analogous with them. *The reaction of iodine and sulphuric acid having once been established, nothing can be described as a corpus amylaceum which does not exhibit this reaction. At most can such bodies be termed corpora amylacea spuria.*

To this class of false amyloid bodies, which have been explained as true, belong—

1. The *brain-sand*, noticed by Cohn (Bericht über das Allerheiligen-Hospital, zu Breslau, 1854, p. 24.) Except that Busk (Quart. Jour. Mic. Sc., 1854, January No, 6,) in one instance, under particular circumstances, found in the *corpus striatum* calcareous bodies, whose external soft layer formed a peculiar reddish-yellow color under iodine alone, which induced him to compare it with the immature cellulose of many plants, as of *Hydrodictyon*.

2. Various *gelatinous granules*, which have of late been frequently comprehended under the ambiguous name of “colloid granules.” Many of these are decidedly of an albuminous nature, as I have said before (vol. vi. p. 580.) It is possible that the bodies described by Gunsberg (Zeitsch. f. Klin. Med., v., p. 297) from a colloid tumor of the abdomen belong to this class, although the description is not sufficiently clear; and in a cerebral tumor occurring at the same time, arenaceous corpuscles are described as of an amyloid nature.

3. The *concentric epidermis globules* (globes epidermiques,) which are met with most abundantly in canceroid tumors, and which Gunsberg places with the *corpora amylacea*. To this category also belong, as I before stated (Arch., vol. iii., p. 222,) the concentric bodies of the thymus-gland, of which Funke (Wagner's Physiol., 4th ed., 1854, p. 127,) supposes that they are identical with the *corpora amylacea* of the brain. I have expressly stated (vol. vi., p. 138,) that they do *not* exhibit the peculiar reaction with iodine and sulphuric acid. The same may be said of the so-termed colloid bodies of the *hypophysis cerebri*.

4. The so-termed Hassallian corpuscles in coagulated blood, but which should properly be named after Gulliver, since they had previously been described and figured by him in his translation of Gerber.

5. The *medullary matter* described by me (vol. vi., p. 562,) and identified by Henle with the Hassallian corpuscles, notwithstanding that its analogy with the nerve-medulla had not escaped his notice, and which is placed by Meckel under his “lardaceous substance,” (Speckstoff,) although it is a normal constituent of most tissues. I had already stated that this substance does not exhibit the peculiar reaction with iodine and sulphuric acid. that it is soluble in hot alcohol, in ether, and other substances, in which the *corpora amylacea* are insoluble, and also that it resists concentrated acids and alkalis, which at once destroy the *corpora amylacea*.

In short, this medullary matter (Markstoff) has nothing to do in common with the *corpora amylacea*.

6. *Leucin-granules*, which are so readily separated particularly in extract of milk, and which have also been described by Meckel as a kind of fat, and placed under the lardaceous substances. These bodies also, do not exhibit the reaction with iodine and sulphuric acid.

Among all animal substances there is but one, so far as our present knowledge extends, which can be brought into question, and this is *cholesterin*. The great difference which exists between *cholesterin* and the *corpora amylacea*, I have already (vol. vi., p. 420) pointed out in a cursory manner. It will be sufficient, here, to remark that *the cellulose-like or amyloid substance, whenever it is met with, exhibits changes under iodine alone without any addition*; thus the *corpora amylacea* of the nerve substance exhibit a bluish, and those of the spleen, liver, and kidney, a yellowish-red color. Were this not the case it would have been quite inconceivable how Donders and Busk should ever have thought of such a thing, as at once to declare them to be of the nature of starch. No sort of *cholesterin* upon the simple application of iodine presents any change of the kind, and still less is it witnessed in situations where *cholesterin* in the combined state exists abundantly; as, for instance, in the nerves and in the spleen, of which I have shown that when it has not undergone the amyloid change, still it contains a very large amount of *cholesterin* (vol. vi., pp. 425, 565.) On the other hand I would again remark, that *sulphuric acid by itself changes cholesterin-crystals into brown or brownish-red drops* (vol. vi., p. 420, *vid*; also Wurzb. Verh., B. i., p. 314,) whilst the *corpora amylacea* are destroyed without any change of color.

Busk, in his researches, besides iodine with sulphuric acid, also employed Schultze's reagent,—chloride of zinc and iodine,—and obtained also by its means the blue reaction. I can confirm this as regards the brain, as well as with respect to the waxy degeneration of the spleen, liver, and kidney. This reagent even is to be preferred, from its greater convenience of application, to the iodo-sulphuric acid, only it must be very carefully prepared. At first I had hoped that it would afford a new test by which to distinguish *cholesterin*, but it was soon apparent that it also induced the most beautiful blue color with that substance, although very slowly. At the same time I perceive, with much astonishment, that in England many conceive that the amylaceous nature of the bodies is proved by this reaction. This is altogether erroneous, for it is precisely this which is to be regarded as especially characteristic of cellulose.

In the impossibility of completely isolating the substance in question, I have repeatedly sought to produce its characteristic decompositions. My endeavor to change it into sugar, by means of sulphuric acid failed (vol. vi., p. 426.) I then experimented with

saliva, and of course with *saliva* which was proved to be capable of readily decomposing vegetable starch. But these experiments also afforded no satisfactory result, either with normal saliva or with the secretion of a person under mercurial salivation, which possessed very energetic decomposing properties. Another series of experiments appeared to afford more satisfactory results; but I was unable to arrive at any definite conclusion, owing to the circumstance that, latterly, fresh materials were wanting. In any case the question remains in this state, viz:—that of all known substances none appears so closely allied to these substances as are starch and cellulose.

In respect to the situation in which the degeneration may be demonstrated with certainty, they are as follows:—

1. The *nervous system*. Besides the situation before noticed may be mentioned the *ligamentum spirale cochleæ* (Wurzb. Verhand., Bd. V., p. 18,) and numerous points in the atrophied substance of the brain and spinal cord. I have myself repeatedly found them in astonishing quantity in the gelatinous and cellular softening of the brain, and particularly of the spinal cord. Busk found them, in one case, throughout nearly the whole brain. Willigk (Prager Vierteljarsch. 1854, Bd. IV., p. 93) discovered them in cicatriform spots in the brain; and Rokitsansky (Sitz. Ber. der Wiener Akad, 1854, Mai. Bd. XIII., p. 122,) in various parts in a state of atrophy, particularly in the brain. Like Busk I have also seen them in the choroid plexus, although I am not quite sure whether they may not have been accidentally introduced.

2. The *spleen*. In this organ the change exists both in the cells of the follicles and of the pulp. The arteries, as has been stated before by Meckel, exhibit the degeneration in their thickened walls throughout all the coats, and, in particular, there is no doubt that the annular fibrous coat also participates in it. Sanders (Monthly Journal, 1854, Nov., p. 468) rightly remarks that the *trabeculae* likewise are changed; I have seen them thickened and rendered blue throughout by the action of reagents. If the deposit is not quite pure, the color is more of a violet tint, or perhaps of green or greenish blue.

3. The *liver*. In the true waxy degeneration it is chiefly the hepatic cells which undergo the change, although it sometimes happens that the intestinal connective tissue as well is implicated in it.

4. The *kidneys*. In these organs the amyloid condition is of the most frequent occurrence. The change commencing most usually in the Malpighian coils and in the afferent arteries, which are enormously thickened and have their walls infiltrated throughout. Next to these the connective tissue, surrounding the papillary *tubuli uriniferi*, is chiefly affected; far more rarely the portions seated higher up.

Further investigations will show whether a simple infiltration

exists in these cases, or a direct degeneration. The case related by Stratford (Quarterly Journal Mic. Sci., 1854, p. 168) of an epileptic patient, in whom *corpora amylacea* are said to have existed in the blood, is not so certain that the matter can be decided by it. In any case, in most organs we have to do with an indubitable change in the structural elements; and should my original view be farther confirmed, this change might briefly be described as a *lignification* of them.

It is of especial interest to consider the finer varieties of this substance in connection with the corresponding vegetable matters. The *corpora amylacea* of the nervous centres, both morphologically and chemically, approach the nearest to the *amylox-granules* of plants. They have the same concentrically-striated structure, the comparatively strongly-reflecting surface, the bluish color, upon the simple application of iodine, and lastly, their swelling in hot, and their ultimate solution, although with chemical change, in boiling water. Busk even says, that Donders and myself have been unable to perceive, that some of the smaller *corpora amylacea* exhibit, in polarized light, a sharply-defined dark cross, the lines forming which decussate in the centre of the granule at an angle of 45° , though it must be allowed that most of them exhibit only a single dark line. The same observer also believes that in one case he perceived minute particles of the amyloid substance enclosed in cells, whose cavity they only partly occupied.

Widely different from the above is the amyloid degeneration of the vessels, of the connective tissue, and of the cells in the spleen, liver and kidney. In these situations I have never obtained a blue, or even a bluish color, by the addition of iodine alone; on the contrary, the peculiar yellowish-red is exhibited, which has from the first surprised me (vol. vi., p. 269,) and which Meckel has since described as "iodine-red," and proposed as a characteristic of his lardaceous substance. But at the same time care must be taken with respect to this, since, especially all parts containing blood, often assume a very similar appearance. At present it appears to me that we are in no case justified in admitting the existence of an amyloid substance, where a violet-blue or bluish-green color is not produced upon the subsequent addition of sulphuric acid or of chloride of zinc. But in all such cases it is advisable by the simple addition of concentrated sulphuric acid, to satisfy oneself that similar colors are not produced by that reagent, as may very well be the case, especially in a series of animal coloring matters.

Whether the yellowish-red, or iodine-red appearance of the parts indicate any specific substance, is still to be shown. Busk seems inclined to compare with it a kind of immature cellulose, such as is said to occur in the lower plants. In any case, however, the deposition of the substance presents a close resemblance to true lignification—the formation of cellulose in plants. But in the vegetable kingdom, as is well known, the most numerous combinations of cel-

lulose with nitrogenous substances are met with, so that, as Mulder in particular has shown, on the addition of iodine with sulphuric acid all sorts of impure colors are presented, constituted of a mixture of blue and red, or of brown and yellow. A similar play of color may be witnessed particularly in the spleen, and especially in the amyloid procured from the pulp and from the follicles, whilst nowhere do the blue and bluish-red colors at once appear so distinctly as in the Malpighian coils and the afferent arteries of the renal parenchyma. It appears, therefore, scarcely to admit of a doubt, *that sometimes sooner, sometimes later, the albuminous substance of the tissue disappears and is replaced by the amyloid.*

In those cases, in which the substance differs still more widely from starch, and more close approaches cellulose, the organs affected exhibit the peculiarly pale, transparent, reddish or yellowish, or even brownish aspect, together with the characteristic, as it were, œdematous consistence, which, as I conceive (vol. vi., p. 426,) should be described as “waxy,” and not as lardaceous. I see with pleasure that the same idea, independently of me, has been adopted in Edinburgh, and the process been at once described as “waxy degeneration” (Monthly Journal, 1854, February and March.) In the majority of cases the indurated organs are at the same time enlarged, so that no doubt can be entertained that new matter must have been taken up.

The coexistence of amyloid disease in the liver, spleen, and kidneys, which has been so often observed, though not so frequently as many believe, of course leads to the supposition of the existence of a common cause—of a *constitutional disturbance*. A humoral pathologist would naturally suppose a corresponding crisis. But a more cautious observer would be satisfied with saying, as I have done in my former communication on the subject of the “waxy spleen,” that the common factor is a cachectic condition, whose more special nature remains to be elucidated.

Anatomy and Physiology of the Kidney. By ALEXANDER HENRY, M. D.

The following is an abstract of an able paper by Dr. Robert McDonnell, of Dublin, published in the *Glasgow Medical Journal* for October, 1854.

After repeated examinations of the kidneys of man and other mammalia, both in the uninjected state, and injected with materials varying much in consistence, Dr. McDonnell adopts the description of the vascular apparatus of this organ given by Frerichs (*Die Bright'sche Nierenkrankheit und deren Behandlung*, 1851.) This description, which, in all material points, coincides with that given

by Bowman and Johnson, runs nearly in these words:—"The manner in which the blood-vessels are distributed, and the mode in which the circulation is carried on in the kidney, are of great importance, in order to clearly comprehend the mechanism of its secretion, as well as the pathogenesis of kidney disease. The renal artery, which is equal in circumference to about one-seventh part of the abdominal aorta, divides, immediately on its entrance into the kidney, into several branches, which pass onwards between the pyramids to the cortical substance; these branches, on their way, give off some small twigs, which furnish capillaries to the straight urinary tubules, and are ultimately lost on the boundary between the medullary and cortical portions, in small vessels, of which a small part only passes into the capillary system of the cortex, while by far the greatest part passes on to and pervades the Malpighian capsules. After entering the capsule, the vessel straightway splits up into from three to five twigs, which, in their tortuous course, fill the capsule, and then again converge into one trunk, which a second time pierces the capsule, generally close to the ingoing (afferent) vessel, and thus passes into a capillary plexus, which forms a network around the urinary tubules of the cortex. The twigs which fill the capsule, and thus form the Malpighian tuft of vessels, are smaller than the ingoing (afferent) vessel, which latter is usually larger than the outgoing (efferent) vessel; but, according to Bowman, this is not always the case. The tuft or glomerulus of little vessels fills the cavity of the capsule, and lies naked in it. I agree with Bowman and Johnson in considering that these vessels are not clothed with epithelium, as Gerlach maintains. The outgoing (efferent) vessels of the Malpighian body form a close anastomosing network around the tortuous urinary tubules of the cortex. These gradually uniting into larger venous trunks, the blood pursues its course to the renal vein, which leaves the kidney as the artery entered it."

Thus it appears that a Malpighian body is constituted by a tuft of vessels lying naked in the dilated termination of a uriniferous tube forming *the capsule*. The small vein by which the blood leaves the Malpighian body can, with the utmost ease, be injected from the artery, as can also the outgoing vein, and the network in which it loses itself. Nay, more, a thin injection, thrown in this direction, flows often without difficulty from the renal vein. But no injection, however fine, had Dr. McDonnell been able to throw in in a retrograde course (that is, from the vein,) so as to fill the vessels in the Malpighian body. This fact Bowman explains by the mechanical obstruction offered by the capillary network through which the injected fluid must pass, when thrown in from the vein. This explanation Dr. McDonnell does not consider satisfactory. He has passed a gentle stream of water into the artery of a kidney. After a little time the fluid flowed from the vein deeply colored with blood. After maintaining this water circulation for a sufficient

time to clear out the contained blood, he has tried to pass the stream of water in by the vein and out by the artery. The kidney swelled to a great size, but even great pressure would not effect an artificial retrograde circulation. He has tried the same experiment with spirits of turpentine, spirit of wine, and other subtle fluids, with almost constantly the same result. He has never succeeded in filling the capsule of the Malpighian body with fluid injected from the pelvis of the kidney, although he has often filled the tubes as far back as the surface. He agrees with Bowman as to the difficulty of effecting this, but not as to its impossibility. Toynbee's assertions seem too circumstantial to be devoid of truth (*Medico-Chirurgical Transactions*, vol. xxix); and Dr. M'Donnell has in his possession a preparation made by Professor Hyrtl, of Vienna, and thus labelled by that eminent anatomist:—*Sectio renis hominis; injecta in pelvin renalem materia alba usque in capsulas Malpighians progressa est.*" The sessile dilatations connected with the tubuli uriniferi, mentioned by Gêrlach (*Muller's Archiv.*, 1845), he has never seen.

The following account may be given of the circulation in the kidney:—A stream of blood is directed to the kidney through an artery, very large in proportion to the size of the organ, and with considerable force. The blood passes through a double system of capillary vessels; first, in the corpora Malpighii; secondly, in the anastomosing network on the walls of the uriniferous tubes; and ultimately makes its exit by a large venous trunk—the renal vein—which joins the ascending cava some way below the hepatic veins. The renal vein, at its junction with the cava ascendens, is often guarded by a valvular apparatus, which is met with very frequently if not constantly, in the horse, and sheep, and occasionally in man. This valve prevents, more or less completely, a regurgitation of venous blood from the cava to the kidney, and consequent venous congestion of that organ; an occurrence which must otherwise readily take place from valvular disease of the heart, or any other lesion retarding the venous circulation.

It may be supposed that, while the stream of blood is flowing in its normal course along the cava ascendens towards the heart, these valves prevent the blood of the extremities from entering the renal veins; but that, if a current pass down the cava ascendens, this valvular apparatus, by flapping out towards the middle of the cava, would favor the passage of the venous blood into the mouths of the renal veins. The examination of the valve in the recent state is sufficient to refute at once any such idea. The fineness and delicacy of the membrane composing the valve is such that any current, however feeble, entering the mouth of the renal vein, must carry the membrane with it, and so close, or help to close its orifice. The presence or absence of this valvular apparatus must be of importance in the consideration of renal diseases, its deficiency no doubt predisposing to congestion, and consequent chronic disease of the kidney.

According to Bernard (*Archives Generales de Medicine*, vol. xxii,) there exist channels of anastomosis between the vena portæ and the cava ascendens, which enter the cava behind the liver, and at the lower part of that portion of the cava which lies in contact with the liver. During digestion, the greater part of the portal blood, coming from the intestines, enters the liver, there to be purified. Part, however, of the portal stream passes through the anastomosing channels directly into the vena cava ascendens; and this must likewise be purified by glandular action. Bernard, therefore, asserts that "There exists in that portion of the inferior cava which lies behind, and is below the orifices of the hepatic veins, a muscular coat of considerable thickness, the contractions of which cause the cava and renal veins to pulsate during digestion, the pulsations not being synchronous with those of the heart. In addition to this muscularity, the inferior cava of the horse presents two valves, attached to its wall immediately below the orifices of the renal veins. Now the consequences of this arrangement are as follows:—During digestion, the liver becomes congested, the portal blood regurgitates, and would stagnate but for the existence of channels enabling it to pass into the inferior cava below the orifices of the hepatic veins. The blood thus diverted is not permitted at once to mingle with the general circulation, before being submitted to glandular action. The muscular coat of the inferior cava contracts and greatly diminishes its channel; the impeded blood is thus thrown backwards on that ascending from the limbs, but the valves below the orifices of the renal veins prohibit further regurgitation, and it is compelled to flow off right and left by the renal veins to the kidneys, which eliminate from it such materials as are excessive and pernicious; and so the *urina cibi* is constituted. Meanwhile, the order of the circulation is interrupted by the arrest of the blood ascending from the lower limbs, in consequence of the closure of the valves below the renal veins; but this disturbance is provided for by the existence of the vena azygos, which receives the impeded blood, and conveys it to the superior cava."

There is no doubt that, in man and many other animals, especially the horse, the coats of the vena cava become greatly thickened where this vessel is in contact with the posterior part of the liver. This thickening is chiefly composed of condensed fibrous tissue, with abundance of yellow elastic fibres intermingled. It varies much in thickness in different horses; and soon after death it contracts, so as to throw the lining membrane of the vein into longitudinal folds.

An examination of the valvular apparatus in the horse, or, perhaps better, in the sheep, will be sufficient to convince the observer that it is not adequate to perform the function assigned to it by Bernard. Dr. McDonnell has injected with saturated solution of bichromate of potash and acetate of lead, thrown in one immediately after the other, the vena cava of a rabbit, from below towards the

heart, having tied the vessel above the diaphragm. The injection, which passed readily into the liver so as at once to make it quite yellow, frequently did not make its way to the kidney at all; and when it did, it was found more rarely in the left than in the right. The same result followed when the fluids were thrown down the cava from the heart.

In repeating these experiments, Dr. McDonnell has not always succeeded in obtaining the same results as Bernard. When cyanide of potassium, mixed with carbonate of soda, is introduced into the stomach, the urine presents a blue color on the addition of a salt of iron, and the salt is found in large quantities in the blood of the renal veins, while there is scarcely a trace in the jugulars. Dr. McDonnell finds that the animal dies in a few minutes, if the solution be strong; and if it be sufficiently weak not to kill at once, the amount is too small to be detected in the blood. In the second experiment, a solution of cyanide of potassium, in the proportion of 20 parts of the salt to 100 of water, was thrown into the mesenteric vein of a rabbit. The urine in a few minutes contained a large quantity of the salt, but the animal suffered no inconvenience from its presence in the portal blood. When, however, a solution containing two parts of the salt to 100 of water was thrown into the jugular vein, the animal dies in a few minutes, before the slightest trace of the poison could be detected in the urine. Dr. McDonnell has found the weak solution of cyanide of potassium (2 per cent.) equally fatal, whether injected into the jugular or mesenteric vein, in rabbits operated on, both when fasting and during digestion, producing death in from four to ten minutes. When prussiate of potash and lactate of iron solutions are thrown into the subcutaneous cellular tissue, in different parts of the same animal, a blue color is soon observed at the seat of the iron injection, becoming very marked in the course of half an hour, and the urine is found to contain prussiate of potash abundantly. If at the end of half an hour the animal be killed, and some of the serum of the blood, of the urine and of the bile, be tested with solution of lactate of iron, a great abundance of prussiate of potash is detected in the urine, much less in the serum, and none in the bile. If, also, a drop of the iron solution be applied to the cut surface of the lung, liver, pancreas, parotid gland, and kidney, while in all of these organs traces of the prussiate are discovered, the kidney alone becomes of a deep blue color. The same test shows a trace of the prussiate of potash at the pyloric extremity of the stomach, before any can be detected in the duodenum, ileum, or cæcum. This experiment merely proves the *elective* power that the kidney exercises. When prussiate of potash is introduced into the blood by the way mentioned, it pervades the whole of the circulating fluid, and is laid hold of by the kidney for elimination. When, however, a solution of lactate of iron is thrown into the subcutaneous cellular tissue on the back of a rabbit, and a solution of prussiate of potash

introduced into the stomach, no blue coloring occurs at the seat of the iron injection; nor on killing the animal at the end of half an hour is any prussiate of potash to be detected in the serum of the blood; the urine contains the salt but sparingly, and neither the kidney nor the other organ exhibits the least tinge of blue on the application of the solution of lactate of iron. The same was the result when the animals so treated were allowed to survive many hours.

This experiment does not seem to prove that the prussiate of potash absorbed by the stomach, and thus entering the portal blood, was got rid of through the *hepatico-renal* circulation; for once absorbed into the portal system, assuming for a moment the truth of Bernard's theory, the greater part of it would pass on through the liver, and thus enter the general circulation. The fact seems to be, that the yellow prussiate of potash, when taken into the stomach, is not absorbed into the system so rapidly as when injected into the subcutaneous cellular tissue.

Robinson's (*Medico-Chirurgical Transactions*, second series, vol. iii., p. 56) experiments "illustrating the effects of venous obstruction on the kidney and its secretion," which have been repeated and confirmed by Frerichs (*Die Bright'sche Nierenkrankheit*, p. 276,) prove that not only does bloody or albuminous urine in all cases follow such obstruction, but that, as a consequence, the kidney enlarges rapidly to a great size. Thus, in the greater number of the cases in which he applied a ligature to the renal vein in rabbits, bloody or albuminous urine immediately resulted; and on killing the animals, in from ten minutes to half an hour, the kidney of the side operated on was found to weigh *twice* as much as the sound one. Frerichs states that, in an old rabbit in which the left renal vein was tied, after twelve hours the urine was found bloody and highly albuminous, the left kidney was more than double the weight of the right, and the urinary tubules were filled with blood. An increased supply of arterial blood does not, according to these physiologists, give rise to these consequences in so marked a degree as venous congestion. After applying a ligature to the aorta, immediately below the origin of the renal arteries, Frerichs says, "only in a few such cases could I discover traces of albumen. The extirpation of a kidney (which causes a determination of blood to the other) produces this result in a very slight degree. The kidney may, after the course of ten days, double its weight; but albuminuria does not follow."

Dr. McDonnell judiciously observes that, in treating of the diseases of the kidney, it should always be borne in mind that albuminuria is not a disease, but a symptom—a symptom which, independently altogether of any *organic* affection of the kidney, may result from particular conditions of the blood and its albumen. Kierulf has shown that considerable dilution of the blood with water is followed by the secretion of albuminous urine. Vogel has

observed that the respiration of arseinuretted hydrogen gas causes the flow of dark-colored urine containing albumen; and Bernard has proved that the kidney has the power of selecting for elimination albumen thrown into the veins of the neck, and which, consequently, has not been so assimilated as to suit it to be retained in the system. No doubt venous congestion is in many cases the starting point of chronic renal disease, accompanied by albuminuria, with deficiency of the normal salts of the urine, and especially of urea; and many of the alarming symptoms met with in such disease are due to the retention of urea in the blood. Hence much practical importance is to be attached to the researches of Bernard, and Barreswil, regarding the mode of elimination of urea after extirpation of the kidneys, from which they conclude that the urea is got rid of by the secretions of the intestinal canal, and chiefly as an ammoniacal salt in the gastric fluid after such extirpation. This is a fact, which not only explains in some degree the tendency to gastric irritation and diarrhœa in Bright's disease, but also suggests an idea concerning the treatment of threatened uræmic poisoning, which is well worthy of attention.

EDITORIAL.

Valedictory.

As was intimated in a previous number, the undersigned is about to retire from his connection with the Peninsular Journal of Medicine. In doing so, he takes this occasion to return his thanks to all those good friends who have stood by and supported him with their friendship and their contributions of the purse and the pen.

In taking leave, it may be worth the while to put upon record the history of the origin of the Journal. Previous to the year 1853, all attempts to give a permanent organization to the medical profession of this State had failed. This want of success was not owing to any deficiency of zeal and talent in the able men who attempted it, but resulted partly from the fickleness of the Legislature, who at one session would give a charter to a State Medical Society, and at the very next one would repeal it, and send its creature back to

legal nothingness ; and partly from the want of a Journal as the organ of expression and intercommunication to the physicians of the State through which to arouse and keep up their *esprit du corps*. Early in the spring of 1853, the writer consulted with several medical gentlemen respecting the propriety of making one more attempt to organize a State Medical Society, coupled with the proposition to start at the same time a Journal which should advocate its interests and stir up the profession to sustain it. The plan was agreed upon, and in the spring of that year a call was issued for a meeting for the purpose of organizing, signed by a large number of gentlemen who favored the enterprise. On the second page of the same sheet which contained the call, the undersigned issued a prospectus of the "Peninsular Journal of Medicine." The first number was issued in July of the same year. For the first year he sustained the editorial burden alone. At the end of that time he found the tax both upon mind and purse, in addition to the duties which his offices in the University imposed, to be too much for one person to sustain, and at his request, Prof. PALMER consented to join in the enterprise. To his labors and able pen the second volume of the Journal was very much indebted, and by our joint labors its condition was decidedly improved.

Having resigned his post in the University in order to accept a call to another Institution, the writer is obliged to give up his connection with the Journal. In doing so he cannot but regret the parting from the many warm friends who have cheered his labors with their approval : yet he has the high gratification of announcing that his departure will in no way prejudice the interests of the Journal. Arrangements have been made for an enlargement of the editorial corps by the addition of three gentlemen of distinguished ability. The arrangement and division of duties among them, and above all, the proved character and energy of the men, is such that we have no hesitation in assuring our readers that from the time they assume the conduct of the Journal additional life and vigor will be infused into its affairs. We know of no better hands into which it could have fallen, and their success will fully make good our prediction in their behalf. With pleasant anticipations for the future, therefore, and with ardent good wishes for the honor and welfare of those we leave, we bid our friends good bye.

E. ANDREWS.

As has been intimated in the valedictory of our associate, the next number of this Journal will be issued under somewhat new auspices. While we part with deep regret from Dr. Andrews, to whose zeal and energy the Journal owes its origin and so much of its subsequent success, we are happy to announce that the arrangements for the future are of the most satisfactory character.

Prof. Z. PITCHER, so long and so favorably known to the profession and people of this State and the country, will hereafter be Senior Editor with the undersigned, while we shall be ably assisted by Drs. WM. BRODIE, and E. P. CHRISTIAN, as Associate Editors.

In the division of labor which will result, our readers may expect that neither will be done imperfectly or in haste, and we hope not to be surpassed in the character of our Journal by any other similar one in the country. We think we possess both the ability and the *will* to realise this hope. With these flattering prospects for the future, we call upon the profession of the State and the west with increased confidence, to aid us by their contributions and subscriptions, both of which are so indispensable to our full success.

Exchanges and correspondents are requested hereafter to direct to the Peninsular Journal of Medicine, Detroit, Mich. Remittances and all financial business should be directed to either as above, or to Dr. WM. BRODIE, Detroit.

In parting with Dr. ANDREWS, who has sought in his new situation a wider field for the practice of Medicine and Surgery, we can neither do justice to our own feelings, or to his character, without adding a single word in expressing our appreciation of his high talents and great moral worth. Our association with him in every respect has been of the most agreeable character, and although we part as co-laborers in this particular enterprise, we hope never to be severed in these more intimate and tender relations which bind together friends, animated by similar impulses in the prosecution of a benevolent and noble profession.

A. B. P.

The University of Michigan, Rush Medical College, and the North-Western Medical and Surgical Journal.

Our article in the July No. of this Journal respecting our review

of Dr. Cabell's report on Medical Education and the course of the senior Editor of the *Northwestern Medical and Surgical Journal* in relation thereto, has called forth from Dr. DAVIS, the Editor in question, *nine* pages of printed matter, which in character has utterly astonished us, notwithstanding the "shadow cast before" by its predecessor in the May No.

We hope no exception will be taken to this expression of astonishment, as we intend it as a compliment to the general character of the Editor; for, notwithstanding our fixed determination to adhere to the strictest rules of editorial courtesy, to treat our assailant with the utmost fairness—with forbearance even; yet justice to ourselves and the cause we represent will require us to point out such an array of unmanly evasions and untruthful statements, of false accusations and bitter bursts of feeling, that should we regard them as things to be expected, the circumstance would argue very unfavorably for the general conduct of their author.

We assure our readers that we pursue the controversy, or rather continue this defense, with the greatest reluctance. We are fully aware of the usual unprofitable nature of these contests, especially when assuming, as this seems to have done, so personal a character. We well know how little the public care to interest themselves in such affairs—indeed, how heartily they are often disgusted with them—and how seldom does the most triumphant vindication or successful assault win laurels for the victor. Our respective Journals circulating among different subscribers, but few see both sides of the question, and fewer still will give the subject such a careful consideration as to fully discover who is in the right, but observing only the general fact that both parties are accused, will draw the common conclusion that both are in fault.

Besides these general reasons for avoiding such controversies, there are others which have weight in this case, arising from near proximity and intimate relations, professional and social. But notwithstanding all this, a regard for our own reputation and for truth would not allow us to remain silent under charges of making "baseless pretensions," of indulging in "arrogant flourishes"—in effect, of practicing falsehood and imposition, when we felt a consciousness of being guilty of no such offenses, and when it was within our power to make it so appear. And much less can we now remain silent under charges in terms, of uttering "the most glaring falsehoods," of "setting at nought the common courtesies of life," of

making statements "with as little regard for truth as modesty," &c. &c., when we know it to be in our power to triumphantly repel every charge, item by item, and vindicate the truth of every assertion we have made.

Our readers must judge whether in conducting our defense in the former article, we applied ourselves to the task in a proper spirit and a courteous manner. If in that vindication there was severity, it was unavoidable—it was merely the stern severity of truth—the dispassionate, though earnest casting off of false and odious charges, and allowing them to return, as such charges necessarily must, upon the head of him who makes them. In proving ourselves innocent, we could but prove the falsity of the accusation and the culpability of the accuser. Had there been any other alternative we would gladly have embraced it. All that we said of Dr. Davis' relations to "medical reform" was strictly true, and so far from these relations being discreditable to him, they are the chief basis of his reputation with the profession at large. But this repelling of his accusations, it seems, has given deep offense; and the more so, it appears to us, because the positions taken were so clearly sustained. It seems to be this *proving* of what we stated, that has caused the commotion and brought out such a display of epithets. But we must hasten to a more particular notice of the extraordinary article in the Northwestern Journal, taking up the different items which our space will allow of, in the order in which they occur.

The first statement of the editor is, that in the May No. of his Journal he "simply pointed out what he deemed an unwarrantable assumption of superiority in the system of instruction given in the Medical Department of the University of Michigan as set forth by the editor of the Peninsular Journal, Prof. A. B. Palmer"—and "that neither in the paragraph alluded to, nor in the whole article of which it was a part, did we [he] say *one unkind word* in regard to the Ann Arbor school, or make the least comparison between it and any other school of medicine." It is true no comparison was made between our school and others—but we see in this no evidence of the absence of unkindness. True, comparisons are said to be odious, but they are so only to those who make a bad figure in contrast. The Medical Department of the University of Michigan invites comparison. We deny that no unkindness was used.

We were accused of false pretenses, of arrogantly flourishing, of manifesting a weak spot &c., for making a statement we demonstrated to be true.

It will be recollected that our brief sentence which has called forth all this flow of vituperation, was written at the close of a review of Dr. Cabell's report on Medical Education to the American Medical Association. The sentence had reference to that report and to nothing else, as its language shows. In that report several specific items of reform were commended. We said in regard to them. "We are proud that the Medical Department of the University of Michigan is so far in advance of almost every other School in the country, in the cause of reform *herein so ably pointed out.*" This, the N. W. Journal says, "meant to convey the impression that in its course of instruction and standard of requirements the Medical Department of the University of Michigan was far in advance of all the other Medical Schools." That it is in advance of all the other schools in this country, so far as we know, in some respects at least, particularly in regard to preliminary education and the requirement of frequent written exercises, is true; but the sentence in question did not mean what our neighbor states that it did. In his former article he says that it meant to say, that it was *generally admitted* that the University was in advance of all other schools, now he says it means something else—but it means simply and only just what it states viz; *that in the particulars stated in the report* of Dr. Cabell, of course taken in the aggregate, the University was in advance of almost every other school in the country. *And this statement is true.*

Dr. D. states that instead of adducing proof that his charges of false pretenses and arrogance were unfounded, we dodge the whole question by getting up a most unfair and partial comparison between the requirements of the Michigan University and Rush Medical College. We took Rush Medical College as an average specimen of the Schools of this country, and *fully* and *fairly* compared the University with it in *all the points* contained in Dr. C.'s report in question. Now the only mode with which we are acquainted of testing the relative qualities of objects is to compare them. So far from its being true that this is "dodging the question," it is the only mode of testing it, and the only way of escaping this conclusion is to assume that the specimen taken was not a

fair one for the purpose. If Rush Medical College is not an average school, then was the comparison unfair so far as regards the general purpose. If it is, then is the statement of the Journal that the question was dodged, untrue. The accusation that the comparison which we made between the two schools was not fair and full in all the points in which we attempted a comparison, we shall hereafter prove to be false. The declaration that it was "unfair and unmanly," we place with the other false and abusive language which the editor has chosen to use, and allow it to fall back upon the utterer.

Dr. Cabell's report, as will be seen in the Transactions of the Association, and in the summary as quoted by the N. W. Journal, refers to the following items of reform, viz :

1. A uniform standard of preliminary education, as previously laid down by the Association.
2. Extended terms of lectures.
3. A greatly elevated standard of professional attainments requisite to graduation.

[These three were recommended to be *reaffirmed* as having been contained in previous resolves of the Association.]

4. Daily examinations by each professor *in connexion with lengthened terms of lectures*, thus making the schools take the place of faulty office instruction.

5. Private schools for clinical observation and practice, use of microscope, *chemical manipulations*, surgical operations on the cadaver, &c., by the student ; recommending such schools to those graduates who did not enjoy their advantages during the period of pupillage.

6. Extended instruction on physiology, medical jurisprudence, and comparative anatomy.

These, and these alone, were Dr. Cabell's recommendations of reform, and to these collectively we alone referred when we spoke of the advancement of the University, of which we indulged an honorable pride.

In these recommendations it is true are embraced the chief reforms which have been recommended by the Association. Herein are contained the great principles of a proper standard of preliminary education—a long term of lectures, with thorough daily examinations in connection—such examinations as are alone consist-

ent with a long term;—and a high standard of professional attainments requisite to graduation. The University of Michigan does profess in these great matters, to have taken a step in advance of the other schools. Placed by the munificence of the State above the necessity of bringing down the standard in these important particulars so as to gather in a great number of students to keep the machinery in operation and put money in the purses of the professors, they have required laborious application, severe study and rigid tests of the acquirements, academic and professional, of those who receive the honors of the institution.

Now we repeat, as it is essential to be understood, that the only issue we made was in relation to the specific measures in Dr. Cabell's report. We have never said, that in each minute particular the University of Michigan had complied with the recommendations of the National Association, though in the greater matters it has. This issue, the only one we have made, has been evaded by Dr. D. in his article, in a manner much more becoming a tricky pettifogger than the editor of a respectable Medical Journal.

Space will not permit us to point out in full the particular manner in which the effort is made to show that five out of seven recommendations of the Association have not been complied with by the University of Michigan. A portion only, but that portion, embracing most of the minor recommendations, are paraded forth and made to obscure the more important principles of reform. The great principle of a standard of preliminary education is left out of his enumeration entirely! Has Dr. Davis forgotten that this was among the recommendations of the American Medical Association? He has certainly placed it on record in his recent history of that body, and if our memory serves us right this was the great burthen of his discourses, his articles in the Journals, and his correspondence, when as "the young man from Binghamton," he was endeavoring to arouse the profession to the importance of "Medical Education and Reform;" and even since that time he has made it a prominent matter in his little work on the History of Medical Education. This great principle, *then* so important, is *now* ignored! But alas! time and circumstances change, and men change with them. We shall have occasion to refer to what the Association has recommended before we close, when showing how wide from the truth is Dr. Davis' assertion that Rush Medical

College has complied with all but *two* of the recommendations of that body.

While our neighbor ignores preliminary education, and passes lightly over the lengthening of the lecture term, he gives prominence to the recommendation of having seven professors, and the subject of the abatement of one year from the course of study in favor of those who have graduated in the Department of Arts.

With regard to the seven professors, we regard it by no means important, believing that six would answer every purpose provided their qualifications are sufficient, and the proper time is taken to make their instruction thorough. This is one of the points in which the University is said to have failed in coming up to the requirements of the Association, and yet during its last session that institution enjoyed the services of seven acting professors, besides an occasional lecture from the Emeritus Professor of the Institutes of Medicine and Obstetrics. We will however state that at the next session the acting professors will be six.

With regard to the deduction of one year from the course of study in favor of those students who are graduates of the Department of Arts, we will simply say that there is unquestionably one year's difference in favor of the student who has the thorough mental discipline and the fund of knowledge of chemistry, botany, and the other natural sciences which such a course of study bestows. No one will deny this who has the slightest appreciation of what such a course consists; and yet, speaking for ourselves, we would prefer seeing the term of study for those not having had such a course extended to four years, rather than having that of those who had, reduced to two.

In regard to hospital instruction, the Association has recommended its requirement by the schools as a prerequisite to graduation, only in cases "*where it is practicable*;" and later action of the same body recommends that clinical instruction should be preceded by "a familiar knowledge of the elements of medical science," and that this instruction can be best given by "*hospitals when they are elevated to schools of practice, and by the intelligent private preceptor.*"

These latter recommendations, though quoted by Dr. D., are not enumerated among his seven.

But to proceed to the statement of Dr. D. respecting our compar-

ison of the practice in the University of Michigan and Rush Medical College. We are directly accused of stating falsely in two particulars of our comparison. As no objection is made to the comparison in other particulars we suppose its correctness may be regarded as admitted. Now let us examine these particulars and see whether our neighbor's bold accusations of falsehood are sustained. If they are, we must stand before the profession branded as a traducer; if not, that brand must rest upon our accuser. There is no other alternative.

Dr. Davis says :—" In regard to daily examinations by each professor—Dr. Palmer, with quite as little regard for truth as modesty, makes the following assertion, viz : ' This is only done in a partial and limited manner in Rush Medical College, and by only a part of the professors.' Now we happen to know that every professor in the faculty of Rush Med. C., and also in a large number of other colleges in this country *does* make it a rule to practice daily examinations of the classes in *their* several institutions. And hence, if his assertion to the contrary is not another '*arrogant flourish*,' it certainly is not remarkable for its *modesty*; and until we have some other proof of their superior *advancement* in this particular than his interested assertion, the profession will know how much importance to attach to it."

Now this quotation, if it be not a contemptible evasion,—a shuffling dodge, by the use of the expression "does make it a rule," instead of saying what is actually performed, means that we have falsified in this matter. We hold, with Dr. Cabell, that it is impossible to have "thorough daily examinations of a class such as shall be essential for securing that active, practical discipline of the mind which is one of the most important ends of collegiate instruction," unless "under an extension of the term of lectures" beyond sixteen weeks, at least without interfering with the proper amount of didactic teaching—and we therefore conclude that in Rush Medical College those examinations must necessarily be defective. But we are not left to such inferences. We state upon the authority of common report from students who have attended that institution, and from the testimony of those whom we have recently interrogated on that point, that *all* the professors do *not* make it a *practice* to examine daily upon the lectures of the preceding day. Now let us be well understood—we are assured by students who have at-

tended the lectures in Rush Medical college that some of the professors have a list of the names of those willing to be questioned, and make it a general practice to question such daily, while others of the professors, though they occasionally asked questions at the last session during a part of the course, did not habitually practice daily examinations, and that previous to last year some of the faculty omitted questioning almost if not quite altogether. Dr. D. says they "make it a rule" to practice daily examinations. We cannot say what "rule" they make, but if some of them make such rule, we think we can show from competent testimony that they have hitherto habitually broken it. This we think Dr. Davis must know. When we wrote the paragraph in question we fully believed that some of the faculty did not question the class at all, and we have since learned that in former years such has been the almost, if not quite, literal fact. These particulars, as we have stated them above, we have come at by recent investigations. If they are specifically denied we shall feel called upon to enter upon proof from the testimony of those who know. Making a rule, and practicing according to that rule, are different things. We have charity to hope that the editor of the N. W. Journal makes it a *rule* to treat his cotemporaries honorably and fairly, but his adherence to that rule when under the influence of passion is quite another affair.

The other particular of the comparison between the Medical Department of the University, and Rush Medical College, in which we are accused of falsifying, is, in regard to requirements for admission to the graduating class. Our language is accused in terms of "conveying the most glaring falsehoods." This outrageous accusation (no milder term will meet the case) is attempted to be sustained by quoting a part only of our paragraph, leaving out the important portion which is a key to the whole. By thus perverting our meaning, and stating as a necessary inference from our language what cannot be legitimately drawn, the editor accuses us of conveying glaring falsehoods, and intimates that we knew it! This if designed, and if it was not, the writer must have been under some strange infatuation—some demon of passion, which renders him an object of commiseration, presents its author in a most unenviable light. He who accuses another's language of "conveying the most glaring falsehoods," should at least be confident of his own posi-

tion. For if this language prove, as in this case it will prove, true, instead of false, the accuser, whether his designs be deliberate, or his statements reckless, must sink in the estimation of all honorable men. This is a point so important, touching so nearly our honor, that our readers must bear with us while we examine the whole matter carefully. If it is unpleasant for them to listen, it is much more so for us to dwell upon this subject. By giving our full statement of the point of comparison in question as contained in the July No., and Dr. D.'s perversion of it, the whole matter will be understood. It is as follows :

“The first reform urged in Dr. C.'s report, is the exacting of a higher standard of *preliminary education* of medical students.

“On this point, Rush Medical College exacts nothing of one who joins their class, but the registration of his or her name, and the payment of the ticket fees, if he or she attends the lectures. That institution admits to the graduating class all who have studied the usual time, attended two courses of lectures of sixteen weeks, and who write and hand in a single thesis, which is seldom, perhaps, read—never by the student before the faculty or class.”

“The University of Michigan feels at present under obligation to admit to the *lectures* all who possess a good moral character, and pay the matriculation fee of ten dollars. Those however who are admitted as candidates for *graduation*, must present themselves at the *commencement* of their second course of lectures, or after four years of reputable practice—show that they have studied medicine the proper length of time—must either present clear evidence, by certificates from competent sources, that they have ‘a good English education, a knowledge of natural philosophy, and the elementary mathematical sciences, including Geometry and Algebra, and such an acquaintance, at least, with the ancient languages, as will enable the student to appreciate the technical language of medicine and read and write prescriptions;’ or in case such evidence is not furnished, the candidate must submit to an examination on preliminary education by a committee of the Faculty. The candidates for graduation must also at the beginning of the term pass a satisfactory examination in Anatomy, Chemistry, Physiology, and Materia Medica, and once in from two to four weeks during the entire term, must present to the Faculty, and read and defend before them and such of the class as choose to attend, a thesis on some medical subject, as well as present a final thesis, upon which they must pass a public and rigid examination, usually from half an hour to an hour or more in length. In all these written exercises, originality of composition, clearness of language and doctrine, and precision of thought are requisite, and imperfections are pointed out and commented upon. This ordeal of writing and public reading is a more thorough test of ‘*preliminary education*’ than can well otherwise be afforded.”

At the close of this account we say—“So much for a comparison

on the *point of preliminary education*, Rush Medical College being the type."

Now our neighbor, in his morbid eagerness to convict us of untruth, and give excuse for his original unfounded accusation, has most dishonorably, it seems to us, concealed the fact that we were speaking exclusively on the subject of preliminary education—has garbled our paragraph, leaving out the sentences which so clearly show it, quoting only a part, which, taken out of connexion, seems to mean a different thing, viz: "That Institution (R. Med. Col.) admits to the graduating class all who have studied the usual time, attended two courses of lectures of sixteen weeks, and who write and hand in a thesis, which is seldom, perhaps, read—never by the student before the faculty and class;" and then declares—"It sets at nought the common courtesies of life, and in the position in which it was placed by its author, conveys the most glaring falsehoods." He further says—"The assertion leaves the reader to infer as a matter of course, that no attention is paid to evidence or certificates of age, moral character, term of study, place of previous attendance on lectures, &c.—an inference which Dr. Palmer knows to be utterly false."

This taking a paragraph which is strictly true—a comparison which is perfectly fair, palpably perverting its meaning, and upon the strength of that perversion declaring it a "glaring falsehood," drawing inferences from it that its language will not warrant, and which were never intended, and declaring that its author knew such to be "utterly false"—while it rises to the climax of the editor's article, sinks to a depth of dishonorable detraction which we will leave others to fathom. Had we treated a friend or an enemy thus, we should almost have expected that the very stones would have cried out against us.

That this language may not seem too strong, we beg our readers to look carefully at the matter—to note that in speaking of requirements for graduation under the head of *preliminary education*, we said nothing of age, moral character, place of previous attendance of lectures, &c., either as requirements of Rush Med. College or of the University of Mich., and simply because they do not come under the head of "preliminary education." All that bears upon that subject we did mention—beyond that we did not pretend to go. If we used more words in describing what was required by the University than in stating what is required on the score of preliminary education in Rush Med. College, it is simply because the University requires more. We have the "Requirements for graduation" in Rush Med. College before us as published in their annual announcement, and would quote it in full had we room, and we assure our readers that it absolutely requires *nothing* in relation to an academic or preliminary education but to write a single thesis on some medical subject. This institution requires nothing more; what else therefore could we say? The University requires more things

bearing upon this point, and these we stated. We trust we have made this matter sufficiently clear, and if our neighbor can look over his language without experiencing emotions of shame and remorse, he is possessed of qualities far different from those for which we still give him credit.

The article in the N. W. Journal closes its list of misstatements by saying that Rush Med. College, "instead of failing to comply with *five* out of *seven* of the specific recommendations of the American Medical Association, falls short in only *two*, namely—the length of the lecture term, and the permission of four years practice to take the place of one course of lectures."

Now let us examine very briefly this point, and we shall have done. We have already shown that the recommendations of the American Med. Association, instead of being limited to seven, as the article states, exceed that number. We have not space to copy those items in full, or even specifically to refer to them all. We will see however, whether we cannot find more than *two* with which Rush Med. College has failed to comply. After they are pointed out we presume they will not be denied. They may all be found on the pages of Dr. N. S. Davis' recent history of the American Medical Association. We would refer to pages 42, 43, 44, 67, 70, and 82 of that work for some items not contained in Dr. D.'s *seven* recommendations. With the work in question and the annual announcement of Rush Med. College before us, we find that institution failing to comply with the requirements of the Association in the following particulars:

1. The Association recommends the colleges to require of their students *certificates of preliminary education*, giving the standard. Not one word on the subject is said in the announcement.

2. The Association recommends two courses of lectures in all cases. The announcement states that four years of practice will be equivalent to a course.

3. The Association recommends three months *steady devotion* to dissections as a prerequisite to graduation. The language of the announcement is—the candidate "must have taken the dissecting ticket during one college term." Nothing is said about steady devotion to dissections for three months. Indeed this would be impossible when attending six or seven lectures per day.

4. The Association recommends the colleges to designate the best thesis and the name of its author. Here the announcement is silent.

5. The Association requests the colleges to institute efficient means for ascertaining that students are actually present at the lectures. Rush Med. College has no such efficient means so far as we can learn from the announcement or otherwise.

6. The Association recommends six months' regular attendance upon a Hospital. Rush Medical College requires that a "Hospital

Ticket be taken during one college term" of four months, where the student sees the same patient three times in two weeks!

7. The Association recommends that a familiar knowledge of the elements of medicine should precede clinical instruction. No such requirement appears in the announcement before us.

8. The Association recommends six months lecture terms. The announcement speaks of sixteen weeks.

In this enumeration we have not included the reiterated recommendations from so many sources of a much higher standard of strictly medical qualifications for the degree of M. D., as tested by boards of examination not pecuniarily interested in conferring such degrees, as this, though of the most vital importance as a matter of reform, is rather general than *specific*, as Dr. Davis might perhaps contend, but which has been totally unheeded by our neighbors of Rush Medical College.

Instead then of this school having fallen short of the specific recommendations of the American Medical Association in only *two* particulars, as Dr. D. so positively asserts, it clearly fails in *eight*, embracing the great and important measures overshadowing all the rest, of a high standard of requirements in preliminary education, a lengthened and consequently more thorough course of instruction by lecture, besides the higher qualifications in medical knowledge, as tested in the manner just referred to.

We are at a loss to determine what species of infatuation has seized upon our neighbor to induce him to fill up nine pages in his journal with such reckless statements.

There are other points in this statement which we should have exposed had space permitted. We may refer to some of them hereafter. In the mean time, those who may read this, will judge what credit should be attached to statements put forth under such infatuation as that from which the editor was evidently suffering.

In conclusion we would say, that if Dr. Davis "finds himself placed before the profession in no enviable light," he may blame no one but himself or his evil genius.

His own hand struck the first blow, accusing us unjustly. We repelled his charges, proving them untrue. This seemed to give great offense, and in his excitement he has fallen into the pitiable ravings we have exposed. Our task has been reluctantly performed, and in sorrow rather than anger. He may consider this part of our defence as he did the other, unbecoming a "personal friend." If so we would say that it has not been directed against our friend, Dr. N. S. Davis, but against our unjust accuser—nay, our bitter traducer, the partisan editor of the North Western Medical Journal, and the jealous professor in Rush Medical College.

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NO. V.

ORIGINAL COMMUNICATIONS.

ARTICLE I.

An inquiry into the pathological importance of ulceration of the os uteri. Being the Croonian Lectures for the year 1854. By CHARLES WEST, M. D., Fellow of the Royal College of Physicians, &c., &c., Philadelphia. BLANCHARD & LEA, 1854.

The above is the title of a neatly printed volume of 88 pages, which we have read with interest and pleasure—with interest on account of the great importance recently attached to the subject—and with pleasure to find that the author, in this as in other fields of study has followed the teachings of observation and reason. It must be confessed that physicians are too prone to follow the dicta of high authority, without taxing themselves with the drudgery of laborious investigation and careful observation. If there was a time in France when by the influence of a single individual, a numerous sect assumed that the essential nature of all diseases depended upon Gastro Enteritis. So, more recently in other countries has a large class of physicians supposed that most of the ills that afflict the female sex, might be traced to ulceration of the Os Uteri, and that all the consequences are to be removed by the local application of a single remedy. Whether this tendency in our profession is due to the principle of *imitation* or whether it depends upon the mysterious power of *fashion*

we will not now attempt to determine ; of one thing we are sure, the profession will feel under obligations to the author for correcting, to some extent at least, this tendency in relation to ulceration of the os uteri.

The first lecture sets out with a general historical review of the subject of diseases of women, and after showing that our knowledge of this class of diseases was until quite recently, very imperfect, which resulted from the fact the anatomical and physiological discoveries were for a long time unapplied to these diseases for want of opportunity, and also because the subject was thought to be beneath the dignity of science, the author gives a short account of the Structure and functions of the uterus and the changes which it undergoes in Conception and Pregnancy, in which he says : “ The growth of the pregnant womb is as much a development from a rudimentary condition, as the foetus contained within it.” “ That immediately after delivery the muscular fibers begin to undergo fatty degenerations and finally disappear.” “ The interruption of the course of pregnancy and the process of premature degeneration, as well as the diseases succeeding to delivery at the full period, are often followed by a permanent enlargement of the organ, especially of the more lowly organized cervix.” He then disproves the assumption, that the symptoms which this condition of the organ produces, are caused by *ulceration of the os uteri*. And describes what have been called “ ulcerations of the os uteri ” as mere superficial abrasions of the epithelium investing the lips of the os. These ulcerations seldom or never present an excavated appearance with raised edges, as ulcers on other parts do, but that their surface is smooth or projects but little beyond the level of the adjacent tissue, and he then proves that the discharge in these cases is not from those abrasions, but is derived from within the canal of the cervix, or from the cavity of the womb.

When we consider the low organization of the os uteri, its secondary importance, physiologically — its comparative insensibility to even rude modes of therapeutical treatment, it does seem that the assumption of the importance of these abrasions should rest on stronger than anatomical and physiological data, and accordingly the author makes here a pretty strong statement, viz : “ Those who believe in the frequency and importance of ulceration of the os uteri, have made no attempt to demonstrate those facts by examinations of the body after death, while the only persons who have appealed to its results, alledge this condition to be very rare and very trivial.” The assertion that ulceration of the os, gives rise to induration of the cervix uteri, is

purely imaginary, it has not been proven, few things retard the advancement of medical knowledge, so much as accepting a hypothesis in place of facts. The author's observation leads him to the conclusion that ulceration of the os uteri exerts no special influence, in causing sterility or producing abortion, and that it is very doubtful whether it has any effect in producing enlargement of the cervix. It would indeed have simplified the study and the treatment of uterine diseases very much, to have found that a slight erosion of the mucous membrane of the least important part of the womb, was the cause of four-fifths of those painful ailments to which the female sex is liable, but it would have shown diseases of the womb to constitute a most marvelous exception to the ordinary rules of pathology.

We will now close this notice by quoting part of a paragraph from the 81st page, which we conceive conveys a just idea of the usual treatment in these cases and the true mode in which benefit results from it.

“It may, however, be asked, how is it that such successful results have followed a course of treatment directed exclusively to the cure of the ulceration — that the application of caustics to the os uteri has been succeeded by the restoration of the patient to health? Now I think it should be borne in mind that, in connection with this mode of treatment, various other measures are of necessity adopted, eminently calculated to relieve many of the slighter forms of uterine ailment. The married woman is for a time taken from her husband's bed; the severe exertion to which either a sense of duty urged, or a love of pleasure prompted her, is discontinued; while rest in the recumbent posture places the uterus and pelvic viscera in just that position in which the return of blood from them encounters the smallest difficulties. The condition of the bowels, probably, before habitually neglected, is now carefully regulated, and the patient's diets bland, nutritious and unstimulating, often differs widely from that with which, while all her functions were overtaxed, she vainly strove to tempt her failing appetite. Add to this that the occurrence of the menstrual period is carefully watched for; that all functions are then redoubled, and each symptom of disorder, such as on former occasions had been borne uncomplainingly, though often not without much suffering, is at once encountered by its appropriate remedy; while generally returning convalescence is met in the higher classes of society by a quiet visit to the country, or to some watering place, in pursuit, not of gayety, but of health; and we have assembled just those conditions best fitted to remove three out of four of the disorders to which the sexual sys-

tem of woman is subject. But the very simplicity of these measures is a bar to their adoption; for you will bear me out in saying, that the rules which common sense cannot but approve, but which seem to require nothing more than common sense to suggest them, are just those to which our patients least readily submit. The case is altered, however, when these same rules are laid down, not as the means of cure themselves, but only as conditions indispensable to the success of that cauterization, which, repeated once, or oftener in the week, is the great remedy for the ulceration that the doctor has discovered, and which he assures his patient, and with the most perfect good faith produces all the symptoms from which she suffers."

The interest of the profession in the subject of these lectures, we have no doubt will secure for the book an extensive sale, and we trust a careful perusal.

D. M.

[Our friend Dr. D. Miller, of Chicago, has kindly furnished us with the foregoing notice of Dr. West's lectures on Ulceration of the Os Uteri, which we insert with pleasure, as giving a synopsis of Dr. West's views on the subject — views which seem to be participated in by Dr. Miller. Our own opinion is that the truth in this matter lies between the views of Dr. West on the one hand and Dr. Bennett on the other. We think ulcerations of the os uteri are of more pathological importance than Dr. West teaches, though of rather less than is contended for by Dr. Bennett.]

A. B. P.

ARTICLE II,

"Ulcers," their pathology and treatment, being an essay read before the Detroit Medical Society.

BY ED. BATWELL, M. D.

MR. PRESIDENT AND GENTLEMEN:

There are few subjects within the range of Medical or Surgical science that present more matter of interest at all times, or more matter of doubt and uncertainty frequently as that of "*ulcers*", and their treatment, to which I wish to direct your attention this evening.

The first thing that most naturally suggests itself to our mind is the question "what is an Ulcer?"

On reviewing the authorities on this subject, the inquirer is forcibly struck with the discrepancy of opinion that exists amongst writers as to the definition of the term. Pathologists of the highest

standing, and those whose scientific attainments have given them the foremost place in the ranks of Medical inquirers on the definition of the word "Ulcer" widely dissent from those who previously trod the same path,—and yet the answer given by them to the question, and the solution which they considered infallible is found by subsequent writers, to present as many points of fallacy, as the opinions they so zealously sought to controvert and overthrow.

It is not my intention, this evening, to contrast these several opinions, but rather with your kind consideration, to draw from this labyrinth of uncertainty, some of the most tangible points of interest presented to our observation, and some of the best modes of treatment proposed, as likely to prove beneficial in their results to our patients.

The definition I will this evening adopt is, that an ulcer is "a solution of continuity on the surface of any organ, either caused by the destruction of a portion of its substance by disease, or by an unrepai red injury."

Ulcers may be classified into three varieties,—the healthy, the unhealthy, and the constitutional. The first class I have enumerated, is scarcely worthy of comment, being as it were, the "desideratum" which either nature or the Medical attendant seeks to gain for the reparation of an injury, or for the reproduction of a loss of substance, and is characterized by numerous and florid granulations, secreting healthy pus, the edges of the ulcer being smooth, and covered with plastic lymph, into which the minute arteries and their accompanying veins, from the surrounding healthy structures, shoot and extend themselves. These granulations at first consist of a deposit of lymph thrown out by the wounded vessels, or the surface of the injured part. Into this, very soon the arteries which throw out the lymph extend, and as it were, organize a location in which they may exercise a new and reparative power by the deposition of animal matter, thus, to compensate for any loss of substance that may take place. These granulations are of a bright florid color, highly vascular, and supplied with nerves, as their extreme sensitiveness to external injury fully demonstrates.

The second class of ulcers to which I desire to direct your attention, is that which I have called *unhealthy*, and comprise "Irritable, Indolent, and Phagedenic Ulcers." "The irritable" variety may not at first sight be recognized by the Surgeon, yet generally is marked by peculiar appearances. Thus, the margin of the surrounding skin is jagged and sharp, and appears overhanging the surface of the sore,

which is itself uneven, and presents no prominent points of granulation, but several concavities of various sizes may be seen frequently to exist at the bottom of the ulcer. The discharge is of a thin sanious fluid, which seems to possess irritant qualities—the ulcer itself being excessively painful, and prone to hemorrhage, if touched by any extraneous substance, and some part of it is generally covered with a dirty ash-colored slough, on the separation of which some granulations may arise which are rapidly absorbed, or rather appear to slough off directly subsequent to their formation.

The “Indolent,” or the second variety of this classification, constituting by far the most extensive proportion of the ulcers that come under the notice of the Surgeon, are generally met with on the lower extremities, and present several points of peculiarity. The edges of the surrounding texture are prominent and rounded, the granulations are pale and flabby, and present a semi-transparent appearance, very peculiar and diagnostic. Though one not frequently alluded to by writers, COOPER, however, in the “First Series of Surgery,” makes some comments on the subject, and briefly alludes to the peculiarity of their formation. They appear more of a gelatinous character than that of an organized body, secreting a thin purulent matter, blended with flakes of coagulating lymph, more or less adherent to the surface of the sore. In other cases no granulations are discernable, but a flat brown surface appears at the bottom of the ulcer, “just” as Cooper remarks, “as if a portion of the skin had been removed, and nature made no attempt at its reproduction.” The parts for some distance around the ulcer, are livid and indurated; sometimes the entire limb is swollen, and œdematous, and yet not the soft and yielding œdema commonly observed, but a firm and burning sensation is conveyed to the finger when placed on it. Scarcely any pain is experienced, and men will work at the most laborious employments with ulcers involving the tibia for four or five inches of its length, and yet experience no appreciable inconvenience, except from the trouble arising from dressing the sore. These indolent ulcers are most frequently seen on those above the middle age,—though cases do frequently arise in the younger members of society, where after protracted illness the low state of the system is unable to repair some local abrasion, and indolent sores are formed on the most prominent parts of the extremities. The continued fevers, or the more fashionable “Typhoids,” at present prevailing amongst us, prove prolific sources of ulceration, assuming an indolent character.

I will now pass on to the consideration of the third variety I have mentioned, namely, "Phagedenic Ulcers." These are remarkable for the rapidity with which they draw the surrounding structures into the same condition as themselves, literally as the name implies eating it away. Seldom does a name in Surgical or Medical nomenclature convey the desired impression to our mind more forcibly, than does Phagedenic Ulceration bring before our view, the meaning wished to be conveyed by the term. The surface of the ulcer is uneven, and covered with a yellowish or livid slough, the discharge consisting of a scanty, thin pus, generally tinged with blood, but in the edges of the ulcer does one find the true solution of the word, "Phagedenic." They are uneven, everted, and jagged, and exhibit on each subsequent dressing, the advancing progress of diseased action—some part of the previously sound tissue having become implicated. Good examples of this variety of the ulcerative process, are to be seen in the malignant sore throat of Scarlatina, where the fauces slough, with a rapidity only credible to those who have witnessed it, in its destructive progress. Cancrum Oris and Hospital Gangrene, are diseases too well known to require description, and furnish examples of the true Phagedenic Ulceration. It generally commences from some minute point, and is surrounded by a circle of dusky red inflammation. This rapidly assumes a darker hue, and mortifies—the inflammation extending, and as it were preparing the surrounding tissues for the destruction that awaits them—the pain at first is remittent, but afterwards becomes incessant. The discharges are peculiarly fetid and diognostic, and when once smelt are easily again recognized. The recurrence of Hemorrhage frequently arising from the sore, tends materially to diminish the strength of our patients, who become sleepless, with a brown dry tongue, loss of appetite, a small feeble pulse, bilious vomiting and diarrhoea. Coma and *death* quickly supervening, delirium is seldom or never present.

The third class of ulcers which demands our attention are constitutional; but as neither your time, or my inclination, would permit me to enter into so vast a field of inquiry, I will briefly allude to the most prominent points or characteristic marks that distinguish this species from those we have previously glanced at. The first most natural question is, what is a constitutional ulcer, or what striking difference exists so as to entitle it to a separate classification. In constitutional ulcers we have a local disease, dependant on, and coexistent with, a depraved or vitiated state of the general health, a diseased action kept up, not by any local cause, but by a "vis a tergo;"

or by a certain specific impulse preventing the local disease from yielding to topical treatment, requiring that the constitutional irregularity which is the excitant of the ulcer, should be removed, or at least assisted, previous to our forming any favorable diagnosis, as to the result arising from our treatment of the local injury. I will not allude to the absurd fashion of ascribing to each particular phase, that an ulcer may assume during its treatment, a species of its own, considering them nothing more than the accidental changes or complications which are liable to occur to any sore during its progress. Thus, a "fistulous ulcer," a "carius ulcer," a "fungous ulcer," and others of this class, to which writers assign a distinct species, I consider only signify certain states, incidentally conjoined with an ulcer, and one which may happen to any sore.

Thus having briefly and imperfectly reviewed some of the most prominent points that present themselves to our observation. I pass on to notice some of the most approved of methods proposed for their treatment, and first will mention the mode by which nature accomplishes her designs. Granulation and Cicatrization are the two grand agents she uses for the furtherance of the object she has in view, by these she supplies loss of substance, and tegumentary covering, and in some cases so well is the deficiency compensated for, that frequently the situations occupied by ulcers, cannot be traced so beautifully, has she exercised her separate functions. This is particularly observable in ulcerations occurring on mucous surfaces, such as the tonsils, the mucous coat of the intestines, the Os Uteri, and in Vaginal ulcerations.

The treatment of healthy ulcers requires no comment. Let nature have her own way,—she is sufficient for the task, neither requiring to be soothed, or yet to be urged onward. She merely seeks protection. I have seen more indolent ulcers produced, (and have done so myself,) from healthy ones, just for the sake of "doing something," than from any other source, barely excepting the "Typhoid Fever" cause, before mentioned.

"Now, the "Irritable" ulcer requires some more active treatment. It has to be soothed; the cause of irritation has to be removed, and the existing irritability of the ulcer has to be allayed. The best topical applications will prove of no possible benefit unless perfect and complete quietude of the part is strictly enjoined,—opiate applications, such as decoction of poppy heads, or the watery extract of opium, or the extract of *Hyosciamus* or *Conium*, are amongst the most beneficial agents we possess for the alleviation of the extreme

sensitiveness of the sore. Tepid water dressing, and nitric acid lotion, five to eight drops to an ounce of water, may in some cases produce marked mitigation of the pain. Leeches to the part have been tried, but with variable results—internal sedatives are generally found necessary, but costiveness has to be assiduously guarded against. Indolent ulcers, as being the largest class, have enjoyed the largest proportion of attention as to their cure. Many plans have been proposed, and have found plenty who strictly advocated the theories advanced. Amongst those that are the most highly spoken of are the various forms of nitrate of silver; but though applications are, or may be necessary, without well regulated pressure, no ulcer of this class can be permanently cured.

The plan of applying adhesive straps as proposed by Baynton some sixty years ago, still holds a foremost place in the estimation of modern Surgery, and having stood as the most reliable method of curing ulcers permanently, and having never yet been found to fail, *if applied after his method*, must make the valuable researches of this Surgeon, ever to be looked on with implicit confidence and trust. The mode of strapping and bandaging, according to the plan proposed by him, are too well known to require description from me, but as to the effect produced, I consider it impossible to say enough as to the beneficial results that accrue from a well directed course of this treatment, and I have yet to see a case that will resist this plan, or at least not derive material benefit from its use—frequently the dressing to the ulcer must be varied, but the chief point to be attended to is, the proper application of the straps. The best stimulant I know of in the treatment of these chronic sores is the red precipitate, either in the form of an ointment, or as I frequently use it, sprinkled over the sore. We are very generally too assiduous in treating these ulcers, with respect to removing our dressings, and unless some peculiar character of the disease demands a more frequent attention, I consider twice a week sufficient for their removal, great care being taken not to injure the soft pellucid cuticle extending from the edges towards the centre. Cleansing the ulcer is also frequently productive of much evil, as the soft plastic lymph, from which we expect the chief hopes of a favorable termination to arise, is too frequently washed and rubbed off.

In the treatment of Phagedenic Ulcers, our course must be far different from that so commonly spoken of with respect of the varieties of ulcers above mentioned here. We have a destructive and rapidly advancing disease, threatening to destroy in its onward progress, the

most vital tissues. We have no time to spare in trying to alleviate the sufferings of our patients. We must destroy both the disease and its secretions, or else it will destroy the sufferer. Escharotics are our chief reliance. The French use the actual cautery, but the proposal of Welbank to remove, by the strong nitric acid, all the diseased structure, has gained the approbation of all modern Surgeons. Constitutional disturbance must be dealt with as the occasion demands. Opium has very generally to be administered, as being the most reliable source of relief for the sufferings both from the disease and from the remedy.

The treatment of Constitutional Ulcers involves, as I previously remarked, far too wide a field both for time or inclination. Thus having hastily and imperfectly glanced at a few of the most prominent symptoms in this vast arena of disease, which the consideration of the subject of ulcers unfolds to our view, I must close these brief remarks with the hope that some one of the members of this Society may again resume a subject, replete, not alone with interest, but with practical importance.

ARTICLE III.

Remarks on the Treatment of Bilious Remittent Fever.

BY SAMUEL DU BOISE, M. D.

Medical men, for a long time, seem to have recognized an analogy between *Bilious Remittent Fever*, and *Intermittent*, to a certain extent, both as regards the supposed cause, and the laws which seem to characterize each.

But upon looking over the teachings of authors upon this subject, there seems heretofore to have been much difficulty under which they labored, and much uncertainty connected with their success in treatment: so that a common result was, that a cure was almost necessarily accomplished at the expense of a considerable length of time, a vast amount of suffering, and much of the constitutional vigor of the patient.

With some, general and local bleeding has been the chief means for effecting a cure. This treatment is not to be unhesitatingly condemned, for in many cases the conditions are such, that no other means will answer the purpose as well. But in the climate where

this disease mostly prevails, and even in *cases* where active depletion is most plainly indicated, there seems to be an influence acting, which frequently, (notwithstanding the best efforts to prevent), results in a typhoid condition: in which little can be looked for but a fatal termination, especially with old persons; and this, even in cases that seemed at first to promise most favorably.

Others have depended on cathartics, and emetics, to reduce the plethora, check the high arterial action, and clear the system of obstructions, and have recommended this as *the* successful mode of cure.

But it will be frequently found that under a free use of these agents the patient will gradually become weaker, with greater frequency of the pulse, and other symptoms of exhaustion.

Diaphoretics, Mercurials, and cold water, have all been extolled, and no doubt are deserving of great credit, especially the latter; but what physician has not lived to see his most favorite means fail him in many cases, where he has not something *resembling* a specific remedy to rely on.

Thus the only plan seems to have been to combat the fever on general principles, until sooner or *later*, during its course the system became reduced to a state incompatible with its farther continuance, when by *some*, advantage was taken of this period for the use of Quinine, but with the greatest caution even then.

That such a course of treatment is attended with great uncertainty with regard to the termination of the case, and especially with regard to the time required for cure, is evident to every one; and Condie says: "When the disease, notwithstanding our best directed efforts, runs on to that stage when its symptoms resemble those of the last stage of typhus fever, nothing is left us but to endeavor to sustain the patient's strength, and remove or relieve any urgent cause of distress or danger."

Now is there not a shorter way to accomplish our intention, and a *means* by which we may arrive with more certainty at the desired end?

We believe there is; and our proposition is to procure a forced intermission, and then take advantage of the antiperiodic properties of Quinine, inapplicable as it may seem according to the views of some, in the early stages of the disease.

Now I shall not set forth the disease in all its bearings and symptoms; nor argue the question as to whether bilious remittent arises from the same cause that produces ague, nor whether that cause consists of a material poison received into the blood, nor yet, whether

Quinine is a specific, or chemical antidote. All this has been done by those better qualified, and all are supposed to be posted on these points.

Nor shall I set up any great claims to originality, though I may be allowed to say that I arrived at some of the conclusions here expressed, long before I received any hints of the kind from a scientific source; and afterwards heard with great satisfaction the same ideas suggested, and the plan approved, by the Prof. of Theory and Practice, in a lecture, during the last course, at the University of Michigan, at which I had the honor to graduate.

But the facts, for such they seem to prove, I *first* learned from a very humble source. Many years ago I was among the early settlers of this State in its wild interior; and when any of our number were attacked with this complaint, the experienced among us would say, "get him into a sweat, and turn it into ague, then give Quinine and he will forthwith be well." And the plan was almost invariable successful. Now this translated into our language would be — procure by artificial means a temporary intermission, and then give Quinine, and your patient is cured, (that is, no collateral circumstance preventing).

But how was this accomplished by the class before referred to? By powerful drastic cathartics, and emetics, steam-baths, warm draughts, hot bricks, and other means, some both absurd and hurtful. Yet as said above, they were almost always successful — few cases running the tedious course described in many of our books. If so much may be done by the ignorant and awkward empiric, how much more by the cautious and scientific physician. But how shall he proceed to reach such a desirable end; and thus save the patient the necessity of "waiting" patiently through a long course of fever "for intermission," in which to administer the "*Magnum bonum*?"

We would say: If great plethora exists to interfere with the proper functions of the arterial system, and with the action of medicine, let blood be taken; and especially, if there be strong indications of local congestions occurring. Water may be used with great advantage both internally, and to improve the condition of the skin — the *prima via* should be cleared, and the liver may need the stimulating influence of a slight mercurial, nauseants, and diaphoretics are often useful to assist in resolving the febrile state.

But we believe as has already been hinted at, that the time has come when by the assistance of (to a certain extent) a new remedy, the treatment of this disease may be conducted with a certainty; and

a cure effected with a rapidity hitherto unknown to the profession. The article I now allude to is the *Veratrum Viride*.

“Bilious remittent fever is closely allied in its nature, the localities in which it chiefly prevails, and in many of its phenomena, to intermittent fever, of which, by many it is considered as a mere modification. It is presumed, and with much plausibility, that a more intense operation of the same morbid cause, required for the production of intermittent fever, engenders remittent” And it is admitted by medical authority entitled to our highest respect, that *Quinine* has a peculiar curative effect in *bilious remittent fever*, especially in its later stages; “so soon as a complete intermission has been obtained; and no symptoms of visceral hyperæmia, or inflammation are present;” though they deny it to be a remedy adapted to control the symptoms in the earlier stages.

Now we claim rather more than this, by saying that even in “the earlier stages,” and whether “visceral hyperæmia or inflammation” be present or not, (and more, that in the “congestive” form it is imperatively demanded,) that we may *produce* a temporary intermission, by the above mentioned general treatment, and the use of the *article* above named, to be followed by full doses of *Quinine to effect a cure*.

One of the principal characteristic, or important elements of all fevers is accelerated, or depraved arterial action.

The *Veratrum Viride* is an arterial sedative of great power: capable of controlling the frequency of the pulsations of the heart, and especially the force, at all times to a surprising degree; * consequently modifying febrile reaction, and abating it, rendering the pulse slower, more soft and natural, (sometimes even more full,) and the surface moist and cool — a state incompatible for the time being, with the continuance of either ferbrile or inflammatory reaction, nothing less than “a perfect intermission,” allowing opportunity for the free action of the *Quinine*. I am not *only theorizing*, for I have some little experience in cases of this kind, as well as in local inflammation, in which I have used the *Veratrum* with very flattering results. It is true that I have met with cases which terminated fatally, in which something so interfered with its action that I was wholly disappointed in my expectations from its use — cases in which the brain, or its meninges were seriously diseased, and in which I dare not bleed at the time I first saw them, from an apprehension that a fatal typhoid condition would almost certainly be the result; and which, in their earlier

* See extract from Norwood's article, with directions for its use. Page 412 of the *Peninsular Journal of Medicine*, March, A. D. 1854.

stages, were of such a deceptive character that it was impossible to detect any head symptoms until it was probably too late to give relief.

Then in cases of bilious remittent, let the rational indications be fulfilled as early as possible, and about six drops of the saturated tincture of the *Veratrum* * be given in a little sweetened water; then after the interval of three hours, or oftner, let the dose be repeated, with the increase of one or two drops each time, until nausea or vomiting is induced, by which, with its sedative effect on the pulse, and the diminution of the heat of the skin, we measure its effect on the system; when usually within twelve hours such an intermission will be produced as to afford a favorable opportunity for the action of *Quinine*. Afterwards, in order that the cure may be permanent, attention must be paid to the correction, and restoration of the secretions, and to the use of whatever means may be necessary to guard against relapse.

LESLIE, Ingham Co. Mich., Sept. 18, 1855.

ARTICLE IV.

Delirium Tremens, as occasioned by the excessive use of Tobacco: being the notes of a case treated by Z. PITCHER, M. D., during the progress of which, scurvy was developed by the protracted abstinence from food, and the nervous excitement thereby induced.

In bringing this case to the notice of the profession, it is not designed thereby to add another string to the great social harpsichord, which already contains so many keyes, that no ordinary performer can move through the diapason, without educing tones offensive to correct taste and painful to the refined and delicate ear. The institution of new isms, is left to those who delight in efforts to exterminate such of the gifts of a beneficent providence, as by their misapplication bring social, physical or moral evil upon mankind.

The psychic and somatic effect of tobacco in a particular instance is all that we aim to exhibit in our report of the present case.

Mr.—, in whose constitution the nervous and lymphatic temperaments are singularly blended, is now over forty years of age, nearly six feet in height, and weighs one hundred and ninety pounds. At

* Keeping in mind its tendency to produce drastic purging when used after, or in connexion with antimony, a circumstance, which, if it occur, will perhaps, render it necessary to abandon the use of the article, at least temporarily, until by the use of Morphine the difficulty be removed.

the age of sixteen he entered the naval service, which he left four years afterwards, in consequence of the formation of intemperate habits. With a view to his restoration to the practice of sobriety, his father sent him into the Indian country, under the surveillance of a responsible trader, whose wintering ground was at Sandy Lake, northwest from Lake Superior. On his way thither, whilst the party were making the portage at the Sault de Ste. Marie, he was seized with *Delirium Tremens*, and was placed under my care by the gentleman in whose suit he was traveling, of which in fact he was one. The attack was violent, and during its continuance he was once rescued from the river into which he had plunged, in order to escape from the persons by whom he imagined himself to be pursued. This was in 1826. From that time, he has never resumed the use habitually, of ardent spirits, but has ever since made a free, perhaps I might say an excessive use of Tobacco, sometimes smoking it, sometimes chewing it, and at others using it in both ways the same day.

From 1826 to 1840 I knew but little of Mr. ——. About that time, (the latter date) he left the Indian country and settled upon a farm on the river St. Clair, from which place he made frequent visits to Detroit, where our acquaintance was renewed, and where he often came to consult me on account of a dyspepsia to which he had become a victim since returning to a more civilized mode of life.

I soon found that such was the condition of the nerves of the ganglionic centre, it being manifested, too, by exquisite epigastric tenderness, that the only remedies which afforded him any relief, were such articles as I could unite with large proportions of Lupulin or extract of *Hyosciamus*.

He continued to suffer more or less from gastric disorder, without relinquishing occupation, till 1849, when his symptoms were so much aggravated by that atmospheric condition which precedes the outbreak of cholera, combined with the moral influence of dread after its development, that I advised him to leave the city, where he had then taken up his residence. In compliance with this suggestion, he selected the Sault de Ste. Marie as his place of residence, for the summer, from whence he returned in the beginning of autumn not improved in health, as the cholera had followed him to Lake Superior, and caused him to retreat from his hygienic refuge. At this time, the derangement of his digestive functions was so great, I advised him to abandon the use of tobacco, as he had previously relinquished the use of coffee with considerable advantage. After a few days he became excited, and began to express apprehensions of a recurrence of *Delirium Tremens*,

feelings which he himself imputed to the small quantities of Porter and Brandy occasionally taken for the relief of his gastric uneasiness. This excitement and dread of delirium, of which he retained painfully vivid recollections since 1826, increased until he became violent, screeched to the extent of his powers, trembled from dread, and passed days and nights in succession, without sleep and without food, refusing the latter, because the house, the room, his bed and every dish seemed filled with forms as awful as Miltonic figures at the gates of hell. He also recoiled from the touch or approach of his nearest friends, and declined taking medicine, though now as ever remarkable for deference to medical opinion, exclaiming, "I know if I take it I shall get the tremors." At length he was induced to take a solution of morphia, so acidulated that he could not detect it by the taste. Of this he would take ℥ss. in the course of a day, without sleeping more than four or five hours in the twenty-four. After a couple of weeks he began to sleep longer at a time, but always awaked screaming with afright. When two weeks more had elapsed, his morphia was regulated thus—a solution containing ℥ss. in ℥iv. of water was prepared, ℥i. of which was to be administered every four hours, unless he slept beyond that time, and in case of unusual excitement, half a dose was to be given during the interval. As the morphia began to induce quiet he would take some nourishment, once a day. This plan was followed up through December, 1849, and January, 1850, when symptoms of scurvy began to show themselves, his food meanwhile, when he took any, having been bakers' bread, fresh butter and green tea. The nervous excitement had abated considerably before the appearance of scurvy appeared, so that we could induce him to eat a little fresh animal food and some green lettuce which could then be obtained at the hot-houses. At the end of February he could be induced to sit up, dress himself and sit down at the table (by himself) to take his food. This improvement was so slow that he did not get out of doors till April, the morphia all this time being regularly continued as before, except that the interval between the doses was lengthened to six hours instead of four. Still the periods of excitement would daily recur, in which he would scream, bite his flesh, pull his hair, and strike at space with all his force.

On the opening of navigation in May, Mr. — was induced to go to his farm on the St. Clair, where he remained till the middle of June, where he improved considerably. As the morphia had been continued for three months, at the rate of gr. iv. a day, and the further use of it, or some equivalent seeming to be indispensable, I was in-

duced, by a conversation had with him at this time, to advise him to resume the use of tobacco, when his health began more regularly to improve, so that he was able to drive about, and by the end of the year he was so well that he joined in the festivities of the Typographical society. From the time he resumed the use of tobacco, the quantity of morphia was gradually decreased.

This is merely an outline history of this remarkable case. We will now add some circumstances which mark its peculiarities still more strongly. I had for years noticed in Mr. — a peculiar manner of rising from his chair, which reminded me of the old word of command in the manual exercise, "prepare to load," and also that he never moved from a position in which he had been standing without putting forward and drawing back again his right foot once or twice before he could get under way. During my early visits to his bed room after he became really ill, I observed that his boots remained for several days in the place, on the carpet, and his clothes on the same chair, which stood quite in the way of his attendants. These things, I supposed, constituted part of the household arrangements, and gave them no consideration, till I found their removal would occasion one of his periods of excitement. When he took a glass of water from the hands of his wife, a number of motions towards it had to be made before he could touch the tumbler, and when he had drunk off the contents, it had to be returned to his lips several times before he handed it to her, which act also had to be repeated several times before he relinquished the hold he had upon it himself. If he asked a question, the answer had to be repeated over and again. When he sat down, he would previously go round and round the chair, and as he rose from it to change his position, he would turn round and round again, and then put forward and back his right foot before he could leave his place. After he had become so calm that I could feel of his pulse, (as there was a time when I could not) I was obliged to reiterate the act again and again before I could leave him. An omission on the part of himself or his friends to conform to this odd requirement, would result in a paroxysm of excitement that might last for hours. The girations were always to the right.

On a careful inquiry into his history, I learned that eighteen years before, Mr. — had some of these same symptoms in a milder degree, so that if he were walking the street and saw in his way a small pole lying horizontally, and a crack in the earth, he would turn round and round first, and then flank by a regular military manœuvre. At this time he had resolved to abandon the use of tobacco, but finding the

desire too strong to contend against, he resumed it, and gradually found himself restored to his ordinary state of health, but had never dreamed that there was any relation between the use or disuse of tobacco, and the propensity to turn slight obstacles in his way, or to turn round and round before he could leave a place where he had been sitting or standing. This incident in his life I did not know of till after I had advised him to resume the habit of smoking tobacco, in 1850.

The foregoing narrative gives but an imperfect idea of the actual suffering, either from nervous excitation or mental hallucination, to which this gentleman was exposed. Being a person of fine religious sensibilities, the fear that he might destroy himself or injure others, was dreadfully oppressive; and when the thrill, occasioned by such a thought, would pass through his system, he would compare his sensations to what he supposed would be the effect of molten lead passing along the nerves with the velocity of electric fluid. His powers of language, at these times, amounted to real eloquence, although naturally diffident and slow of speech.

Although there is no probability that the most extravagant use of this narcotic, could be made to produce similar effects in every variety of temperament, still it has appeared to me that some instruction could be gleaned from the narrative of so unusual a case. The fact that scorbutus occurred under such peculiar circumstances, we consider a sufficient reason for putting the case on record. To this aspect of the case we may recur at some future period, as we have in mind other instances of this dissolving of the tissues arising from the want of nourishment, in cases evidently connected with a defective performance of the offices assigned to the nerves of organic life.

How can this perversion of function in the nerves of voluntary motion, constituting the disposition to turn round and repeat other acts alluded to be explained? Have the impressions which prompted these excentricities been made directly upon the cerebro-spinal axis, or mediately through the emanations from the solar plexus?

In preparing the notes of this case for the press, I have not been able to draw any suggestions from other observers, as the most that I could find on the morbid effects of tobacco, was in the essay of M. M. PARENT DUCHATELET ET D'ARCET, published in the *Annals d'Hygiene*, vol. 1, part 1., on the effects produced upon persons engaged in its

manufacture, of which the French government retains the monopoly. So far as I could learn from the reviews of these essays in the American Journal, they were written for the purpose of defending this article and the government, from the accusations of M. MERAT, who enumerates several painful affections, the paternity of which he imputed to tobacco.

ARTICLE V.

Proceedings of the Detroit Medical Society, reported for the Peninsular Medical Journal.

THURSDAY EVENING, Sept. 20, 1855.

Society met at the office of Dr. J. A. BROWN.

Members Present.—Dr. R. Ingliss, President, Dr. E. Lauderdale, Secretary, Drs. Brown, Brodie, Batwell, Christian, Henderson, Robinson, and Stewart. Dr. Pitcher and Prof. Henry Goadby, members by invitation.

Minutes of preceding meeting were read and approved.

Dr. Brown, Chairman of the Committee to whom was referred the question, "Is the treatment of Procidentia Uteri by means of the Pessary necessary, and if so, what is the best form now in use," reported as follows: After briefly describing the anatomical relations of the uterus, and the imperfect support it derived from the broad ligaments, he proceeded to define what was understood as constituting procidentia uteri, viz.: the descent of the organ into the lesser cavity of the pelvis, so as to pass more or less down the vagina, even protruding beyond the labia. The first condition being the *incomplete*, the second the *complete* prolapsus uteri. But as the question related to the treatment, he went on to state, "there is no one of the several methods adopted for the treatment of procidentia uteri, which has received the concurrent approbation of the profession.

Failure after failure has followed in such numerous successions, that many practitioners have been inclined to withhold all artificial means, and to rely upon the hidden resources of nature to effect a cure.

One would suppose that a careful examination of the attachments and relations of the uterus would assist us in the formation of correct views respecting the most natural and easy means of remedying its displacements. But these examinations, although conducted with a sincere regard for truth, have led to different views of practice. On

the one hand when attributed to relaxed condition of the vagina, injections are advocated, whilst on the other, it has been associated with want of tension of the uterine ligaments.

This latter the reporter was inclined to believe the one that deserved the greatest consideration. He could not believe that the walls of the vagina afforded the principal support to the uterus. As in a natural state the vagina is in circumference greater than that of the uterus. And astringents capable of changing this relation must not only be powerful, but their action long continued. And even then, is not the canal as liable to be shortened as lessened in diameter? And will not this shortening tend to keep the uterus in its place of descent? It seems to be as correct, anatomically to say, that the uterus *suspends* the vagina, as that the latter supports the former, particularly as the upper fifth of the vagina has no very strong attachments to contiguous tissues.

Formerly it was supposed that mechanical support could be applied to the uterus in no other way than by the introduction of the pessary into the vagina. It will be admitted, however, that we have failed to reap those advantages from their use, which high authority has led us to expect.

But in perfect prolapsus or procidentia, as our question reads, a *pessary* of proper size and shape, well adjusted, has been of service, and may be considered the prominent agent of cure.

We need not engage in any speculation as regards the extent of mechanical support which pessaries furnish. It can be reduced to mathematical certainty, and it is evident that a pessary can do no good, except in those cases where the prolapsed organ is *inclined* to *escape* through the *outlet* of the *vagina* as in *complete inversion* and *complete prolapsus*, which we think are included in the term *procidentia*.

In their application, the rules laid down by Churchill, page 255, Diseases of Females, should be strictly observed.

The application of pessaries to the numerous cases of partial *depressions*, or when it is *supposed* to exist, is not only useless, but highly *injurious*, and the many failures to relieve *that* condition of the uterus by such means, has led many practitioners to condemn their use in true *procidentia*.

The real cause of the distress, the symptoms of which so closely resemble those of prolapsus, being dependant upon a congestion of that organ, rather than any serious displacement, it follows that the treatment should consist in the use of such remedies as are calculated to remove that congestion.

The uterus in every degree of its displacement is unduly supplied with blood, and it is of the highest importance that this fact should be borne in recollection in the treatment. Depletion by the application of leeches to the organ, and counter-irritation produced, and continued by the daily application of dry cups to the loins and sacrum, will be found an important branch in the treatment of many degrees of procidentia, and will in many cases accomplish cures without any other assistance than that derived from abstemious living and cautious exercise.

Procidentia frequently accompanies an enlarged and flabby condition of the abdomen. In such cases, a pelvic corset or the T. bandage facilitates the cure, and at least adds greatly to the comfort of the patient.

Those who doubt their utility from theory merely, assert that it is impossible for pressure upon the abdomen to facilitate the ascent of the depressed uterus. This is no doubt true. It is not claimed, however, that mere pressure will restore the prolapsed organ, *without* the use of the pessary, and other means; nor should we aim at this mode of action in the application of our support.

Again, it is contended that pressure applied in such a *way* as to force the intestines *into* the pelvis will *increase* the descent of the uterus. This is true also, and it is all the admission we ask as regards one grand cause of the continuance of the disease. It is conceding virtually that the uterus *may* be displaced by the *weight* of the intestines. Then it follows that a removal of this weight above the brim of the pelvis, and the proper application of the pessary enables the uterus to maintain more readily its true position.

The report closed by urging the necessity of the selection of such a pessary as will give support to the prolapsed organ, and a feeling of ease to that part of the body to which it is applied, deeming the *globe* pessary the most perfect, and suitable for ordinary cases, and referring the society to "Meigs, on the Diseases of Females, page 156, where he notes the superior advantages of this form."

Dr. Henderson signed this report as expressing his views.

The report of the minority which was signed by Dr. Brodie, after a brief exposition of the anatomical relations of the uterus in its normal state, held the opinion that the so called ligaments of the organ had but little to do in preventing procidentia or prolapsus, being from their anatomical relation more to preserve the lateral and antero-posterior position in the pelvis, and that the *TRUE* cause of the condition specified in the question was, owing to want of tone in the

vaginal walls, arising either from general or local causes, or in the system itself. Several extracts were made from the works of "Whitehead" on "Abortion and Sterility," "Brown" on "Diseases of Woman," and "Ramsbotham" on "Practice of Midwifery," all of whom looked upon the healthy action of the tissues of the vagina as being the true source of support to the uterus.

The report proceeded to notice the many causes proximate and remote, that would produce such debility, among others particular stress was laid upon impairment of the general health. Chronic constipation, diarrhœa, and dysentery, hemorrhoidal tumors of the rectum, &c.; also on affections of the uterus itself, as ulceration of the os, polypoid tumors, tedious and complicated labors, &c., too early resumption of the erect posture after parturition, severe attacks of coughing, all have more or less to do in this disease.

The report in reference to treatment, says: "Believing as we do that debility, whether general or local, or even both combined, are the conditions which give rise to, and allow of procidentia or prolapsus taking place. Those, measures, therefore, which tend to counteract these effects, and restore the system to its nominal condition, must be the true basis of scientific medication.

To sum the whole, the patient must preserve the horizontal position—the nates being slightly raised, in this position the parts readily return to their natural place. The food should be unstimulating, and opium should be administered in such quantities to prevent action of the bowels, and keep the parts quiet.

After the inflammatory symptoms are abated, cold astringent and stimulating injections to give the vaginal walls tone, may be used; also the cold douche to the abdomen is especially beneficial.

After a sufficient time, change of air, and a generous diet, are excellent adjuvantia.

Local diseases of the os uteri should be treated for at once, and particular attention be paid to cleanliness.

Should these means fail to reduce the calibre of the vagina, the reporter recommends a removal of a portion of the vaginal mucous membrane by a surgical operation.

The entire report utterly repudiates the use of the pessary as being productive of more injury than good. After quoting several authorities favorable to his views, he expresses his opinion of the pessary, briefly as follows:

"To be of any use, the pessary must be of sufficient size to be retained by the pressure on its periphery, consequently it serves to

keep up an enlarged and expanded state of the vagina, prevent the return of the part to its natural tonic calibre, predisposes to ulcerative disease, both of the os uteri and vagina, serves as a nidus to retard the outward passage of the secretions, besides being in itself sufficient cause to shock the delicacy, and disgust the wearer from all true legitimate medical and surgical treatment."

Dr. Stewart was not prepared to decide. He wanted more light on the subject. He had been in the habit of using the pessary amongst the poor who could not spare time to remain still.

Dr. Robinson had not had much experience in treating prolapsus uteri. He had used the pessary in some cases. A medical friend of his, residing in the country, had used them extensively, and was well satisfied of their utility.

Dr. Christian concurred with the views of the majority report.

Dr. Pitcher did not use the pessary, and had not done so for ten years. He thought the relaxation of the tissues of the vagina, together with the augmented weight of the uterus, sufficient cause for procidentia. He would remove these causes by proper constitutional treatment.

Dr. Batwell said he did not use the pessary, but had seen them extensively tried in the Dublin Hospital, where their use was subsequently abandoned, as worse than useless.

Dr. Inglis thought relaxation of the vagina the great source of procidentia uteri.

The Essayist, Dr. Robinson, not being prepared, was continued till the next meeting.

Reports of cases being in order, Dr. Brodie presented to the Society, a liver, which he had removed from the body of a young girl, aged fourteen years, containing several masses of tubercles.

The girl had been sick over a year, and had died anæmic and dropsical. The lungs were examined, and found perfectly free of tubercle. Several large masses were observed in the spleen, one of which was softened, and on the point of breaking. The dropsy was evidently the result of peritonitis, which peritonitis had been set up by the ulceration of a tubercular mass in the liver, as a large cicatrix was formed on the anterior border of the left lobe.

The specimen was of interest in this connection, as it would go to confirm the statement of Louis that tubercle never existed in the lungs and liver at the same time.

Prof. Goadby thought the assertion of M. Louis incorrect. He was quite sure he had found tubercles both in the lungs and liver of the same subject. He thought, however, that these tubercles might

exist in any organ without influencing their production in another. He wished to remark with regard to speaking of tuberculous deposits. If they are regarded as secretions or deposits from the blood-vessels, it is all wrong. The microscope shows them to be formed entirely from the debris of the structure where they are located; their origin appears to be as follows: A temporary loss of vitality in a given spot in the tissue, which, by continuance, becomes permanent. From that moment, as it cannot be amputated, it becomes liable to the laws which regulate all dead parts; it decomposes, it resolves into its elements; hence, fragments of the dead tissue are presented to the microscope, and lastly, when the artificial formed sac which contains the decomposed mass is entirely emptied by the absorbents, if the surrounding tissue be healthy and vital, it heals by cicatrization. If, however, the neighboring parts be in an unhealthy condition, their vitality is affected by inoculation, and the tubercle spreads.

Dr. Stewart reported the following question for discussion at the next meeting:

Is the local treatment of the diseases of the *air passages* which are situated below the trachea, by cauterization, or any other mode of applying medicines directly to the part affected, *practicable*.

Committee to Report—Drs. Henderson, Batwell, and Robinson.

Committee to report Question at the next Meeting—Drs. Christian and Brown.

Miscellaneous Business.—Dr. Christian presented the name of Dr. J. M. Alden for membership.

Dr. Brodie presented the name of Dr. John A. Kerr.

Both were laid over under the rules till the next meeting.

The Society then adjourned, to meet in two weeks, at the office of Dr. Brodie, Masonic Hall.

W. B.

NEURALGIA TREATED BY EXTERNAL NARCOTICS.—Trousseau is in the habit of employing, in neuralgias and painful rheumatisms, poultices of flax-seed meal, combined with a half tablespoonful of the following mixture: ℞ Extr. belladonna, extr. opium, aa ʒij; pulv. camph. ʒij; aqua ʒjv.

The stramonium can be substituted for the belladonna under some circumstances.—*From Medical Counsellor.*

SELECTIONS.

ON THE UNION OF FRACTURED BONE.

BY MAURICE H. COLLINS, M. B., F. R. C. S., SURGEON TO THE MEATH HOSPITAL, ETC.

That fractured bone is repaired on similar principles to solutions of continuity in soft parts, is a truth with which surgery has only become familiar of late years. The ingenious and complicated theory of provisional and permanent callus is now replaced by one as superior in its simplicity, as the modern appliances for fracture are to the cumbrous apparatus of former days. This improvement in scientific accuracy enables us to explain phenomena which are inconsistent with the older theories: such, for example, as the absence of callus and rapidity of cure, where perfect rest and apposition have been attained; as in the following case, for example:

William Reynolds, aged 30, was admitted into the Meath Hospital, April 3, 1854, suffering from fracture of both bones of the leg, the result of direct violence. The fibula was broken at the centre; the tibia was broken a little lower in two places, leaving the central fragment about three inches in length; both fractures being partly oblique, and partly transverse. The man was slightly under the influence of drink when I saw him, eight hours after the accident; he was inclined to be feverish and restless; and there was some probability of his deranging the fracture if put up in the box or side splints. I therefore applied the starched bandage and pasteboard splints after the manner adopted by Baron Seutin. The evaporation from the apparatus, joined to its equable compression, kept down local inflammation and effusion; and upon slitting it up next day, the fracture was found perfectly in apposition, and free from all symptoms of irritation. It is unnecessary to detail the subsequent history of the case from day to day; suffice it to say, that in four weeks the union was perfect, without the slightest irregularity in either of the bones to show where the seat of fracture had been. No provisional callus had been thrown out, yet the man was able to walk with the assistance of a stick at least ten days or a fortnight sooner than usual.

Facts like this must have come under the cognizance of most surgeons; but yet their application to the theory of the union of bone has been, until late years, imperfectly perceived. Such cases tend to show that the absence of a provisional or ensheathing callus is not only no evil, but that it tends in a direct and absolute manner to shorten the period which is required for union. There is a plain connexion between the amount of callus and the length of time required for consolidation. When from any cause the callus is considerable, recovery is retarded, and there is subsequent debility in proportion. The presence of callus is further injurious.—it is a direct cause of œdema in the limb, both by its mechanical obstruction

to the vessels, and by its inducing a hyperemic condition in the neighborhood of the fracture: this hyperemia is prolonged until the vessels have removed the superfluous mass of bone. We consequently find that fractures which are hard to retain in position, such as Colles's or Pott's fractures, or fracture of the upper part of the humerus, are prone to be followed by long-continued œdema and weakness; and these are precisely the kinds of fracture that throw out callus in greatest abundance. It is evident, therefore, that the mode of union by provisional callus is not the typical and simplest form; and that where nature has recourse to it, it is not because it is the best possible, but because it is the best available means of cure.

If we turn to the simple-laws which regulate the union of divided soft parts, we shall find the clue to the explanation of the union of bone. When a solution takes place in the continuity of soft parts, repair is effected by the organization of a minute layer of plastic lymph which is poured out upon the divided surfaces. Should any substance intervene, so as to prevent perfect apposition, it must be removed before union can take place. The organized lymph surrounds it on all sides; if it is capable of absorption the bloodvessels of the organized lymph remove it; if not, some of the plastic exudation is checked in its development into cells, and is converted into pus, which floats it away.

The source of the plastic exudation deserves attention; the efforts of nature tend to close the mouths of the divided blood-vessels, and any exudation from them must partake largely of the nature of a foreign body; for though some parts of a coagulum may be organized, yet the greater part of it must be removed before that can be effected. The exudation is rather poured out by the walls of the capillaries, and is in proportion to the intensity of the reactionary inflammation: if it is excessive, it also impedes re-union, either by a reflex of pressure on the vessels which are its source, or by an imperfect organization. The latter condition gives rise to suppuration, the former to a structure of low vitality. I have remarked that, in proportion to the energy of all organizing movements, the plasma which is their seat, is converted into nucleated cells, which become subsequently developed into fibres; and into the interstices of these fibres the neighboring capillaries are extended; while by delaying the process, in its early stages, a form of organization is produced, of lower vitality, because less capable of being permeated by blood-vessels; in it there are fewer areolæ, owing to an imperfect development of fibres, and the tendency of such as are formed is to a rectilinear arrangement. This tissue forms the chief substance in the cicatrices of burns, and in other dense and imperfectly organized new structures.

The special organization of any new growth, whether healthy or diseased, appears to have one or other of these forms as its basis or starting point; and a second process, either modelling, or of interstitial deposit, is necessary to stamp such growth with its individual peculiarities. Thus, for example, in cicatricial tissue, which connects divided muscles, whether it be areolar or indistinctly fibrous in the

first instance, proper muscular tissue will be found after a longer or shorter time; it may be laid down without regularity at first, but in course of time, it will assume somewhat of a normal arrangement, and this result will arrive sooner in proportion to the organization of the basis; it will be quicker in the areolar basis, and may never arrive in the fibrous; and in the intermediate forms will be found according as the areolar arrangement predominates. In like manner the yellow elastic tissue is found in old cicatrices of skin; and in all structures the same law of repair appears to hold.

I think it probable that similar laws hold morbid growths, or at least that we shall ultimately be able to refer them to similar fundamental principles. The union of fractured bone, whether perfect or imperfect, can certainly be explained by them. To take the most perfect and rapid mode of union, such as should be the object of the surgeon to attain as far as possible in every case, we find the phenomena to be, generally speaking, as follows. The blood-vessels of the bone and periosteum are ruptured; no displacement of the fracture occurs, so that their mouths are at once closed up; local reaction sets in rapidly, and the result of it is an effusion of plasma between the fragments from the vessels of the bone and periosteum; such molecules of bone as have lost their vitality from the fracture, are removed by absorption, and the broken ends become by this means more vascular and soft. This process, which causes the ends of the broken bone to become apparently rounded, is active in proportion to the vascularity of the bone; it is in fact this preponderance of vascularity on the surfaces of a long bone (internal and external) that causes the edges to round off. The plastic fluid, which lies between the broken ends, is rapidly organized into granular nucleated cells; many of these cells become elongated into fibres, and into the interstices of these the capillaries push on.

This organization of the interposed layer of lymph is effected in about ten days. According as the capillaries are formed, the cells and fibres in contact with their walls begin to be the seat of osseous deposit; the granules and fluid which they contain become saturated with the earthy constituents of bone, and, ultimately, their walls and nuclei also. This process of ossification commences with the full development of the capillaries, and is completed in about a month from the time of fracture in the dense long bones of the adult. The time required is directly as the thickness of the bone, and inversely as the vascularity; the more vascular, the more rapidly the union is completed; the thicker the wall of bone, the longer time is required.

This is the primary process of union or cicatrization of bone under the most favorable circumstances. Even when perfect apposition is not obtained by reason of the interposition of small spicula of loose bone, or isolated fragments of muscle, or small coagula, the process is essentially the same; for substances like these are surrounded by the organized plasma, which unites the fracture round them, and, in course of time, removes them by absorption; so that they only partially interfere, and only for a time, with complete cicatrization. There is,

however, a higher degree of organization, which consists in the subsequent modelling of the bony cicatrix by development of canals, cancelli, osseous corpuscles, &c., such as exist in the rest of the bone. This is slowly effected, and in a manner which does not interfere with the usefulness of the limb. I have not made any observations which throw light upon the mode in which this is done, nor am I aware of any that have been made by others.

In compound fractures the process of union is conducted on similar principles. The only difference which I have observed is, that there is a proneness to throw out exuberant granulations from the injured part. Like the flabby granulations of an ulcer, these consist largely of cells, with very few fibres intermixed; osseous granules are deposited in these cells and in the interstices of them; their deficiency in fibrous arrangement renders them less firm and efficient as a bond of union. If we are to judge by the analogy of the soft parts, and the mode of keeping flabby granulations in check, I suppose we must conclude that these cellular granulations have their origin from bone in the removal of pressure. We see a similar fungating condition of brain in *hernia cerebri* when the pressure of the bony case is removed; and we have also something analagous to it in another growth, which is chiefly cellular, namely, *fungus hematodes*, when the support of the integuments has been removed.

These granular cells, also form the chief constituent of provisional callus, and probably for the same reason. It cannot be poured out unless where pressure is removed to a certain extent; or, in other words, where imperfect apposition of the fragments leaves a space for it. Even when from the violence of re-actionary inflammation much plasma is poured out round the bone, and into its medullary cavity, we have every reason to believe that this is absorbed without undergoing any organization, whenever proper apposition and support is given from the first. In very many cases early attention to these particulars prevents this excessive reaction.

This has a practical bearing on the treatment, for the fact of provisional callus being allowed to form, or forming in spite of us, delays the cure. The layer of plasma which lies between the fragments is not converted into bone until the provisional callus is ossified; so that a patient is often allowed to use his limb when the real process of union has only commenced, and a slight injury at that period will suffice to refracture the bone, or, more properly speaking, to fracture the callus; besides, this callus takes ten days or a fortnight longer to ossify than the thin layer between the fragments, when the latter exists alone. Hence patients feel less confidence in using their limbs. There is a plain feeling of impaired strength in the bone; the extra time of confinement to bed weakens their muscular powers, and the œdema which is kept up both from mechanical and vital causes, in such a limb, is a further reason why union by the help of provisional callus should be avoided if possible.

One of the first cases in which I used the starched apparatus of *Seutin* illustrated many of these remarks. Probably from the want of

practice in its application, or from dread of applying it too tightly, I failed to procure union without ensheathing callus. The boy was two months before he could bear to lean any weight upon the limb; it was a good deal wasted, and in going about he fell and re-fractured the bone; it was now put up with considerable care, when we found that the callus was soon absorbed, and union of a firm nature took place rapidly. In several other cases I used this apparatus and found the result exceedingly satisfactory. Fracture of the tibia, or of both bones of the leg, whether uncomplicated or comminuted, when put up immediately after the accident, knit firmly in less than four weeks; the perfect repose in which they are thus kept enables the process of direct cicatrization or union by the first intention, as it may be called, to be rapidly effected. In oblique fractures of the tibia, whether with lateral or antero-posterior obliquity, it is peculiarly useful. I have also used it in Pott's fracture with good results; even in this fracture I am able to allow the patients to get out of bed and go about with the foot in a sling upon the third or fourth day. It thus enables us to do what Mr. Amesbury proposed to effect with his portable splint, and with almost a certainty of success, and little trouble.

The ligamentous substance which forms the bond of union in cases of what are called false joint, presents us with an example of arrested organization; and the various forms in which it is found, as well as the various means of cure, can all be explained by a reference to the laws of union in soft parts. The organization of the plasma may be delayed *in limine*; the fluid may then simply coagulate into what is called nucleated blastema,—a tissue, as I have before mentioned, with little or no cellular or fibrous arrangement, and comparatively devoid of vascularity. When a little more rapidly organized it becomes simply fibrous, the fibres running parallel. In short, every gradation is observed between the dimly granular basis of simply coagulated blastema, and the perfect cellulo-fibrous or nucleated fibrous reticulated tissue. Ligamentous union of bone may exist in either of these conditions, or in any intermediate stage; and the success of any mode of cure will depend on its being adapted to the degree of organization. Where any amount of vascularity exists, successful union will be effected by removing the interruption to the further action of the vessels. It will suffice to place the limb perfectly at rest, and the blood-vessels will deposit osseous matter in the blastema which has been organized; even if the nucleated blastema forms the chief basis of the membrane, it becomes infiltrated, though slowly, with earthy matter, and a certain amount of local stimulation to the vessels will aid the process. If the connecting medium be very dense, and almost devoid of vessels or of organization, it will not be possible to convert it into bone, and the means of cure in that case will be such as will excite a fresh inflammatory action in the part. In such a case the dense cicatricial tissue is removed by the action of the excited vessels, just as it is in very dense strictures of the urethra, when we excite a new inflammatory action in the neighborhood, either by caustics or by incision; the process is, in fact, ulcerative absorption.

It is to such cases of false joint that the seton is applicable, and its occasional failure will probably be found to depend on its doing too much in cases where it is not applicable. The use of ivory pegs, resection, and other plans of treatment of similar violence, are applicable to such cases. Fortunately, they are comparatively rare, and the simple adherence to perfect quiet is sufficient in the great majority of cases, both to prevent the recurrence of this *contretemps*, and, if it does occur, to remedy it. I have found, as most surgeons probably have, that the simple starched bandage, strengthened, perhaps, with a little brown paper, will cure the greater number of ununited fractures. I have seen a dense ligamentous union of an oblique fracture of the tibia converted into bone, in six weeks, by this means alone.

The mode in which I apply the starched apparatus is nearly the same as that laid down by Baron Seutin. I have found it useful, however, to wet the bandages before rolling them; they lie more evenly, and with less strain at the edges, points of much importance where the slightest irregularity leads to œdema or vesication and pain.

Having protected all bony prominences with cotton-wool or soft tow, the wet roller is applied with perfect evenness to the limb, from its extremity to beyond the joint above the seat of fracture. The outer surface of this bandage is now smeared with starch; narrow splints of porous pasteboard, softened in boiling water, and smeared with starch, are applied at each side; and, if necessary, behind and in front of the limb, extending upwards as far as the bandage. The edges of these splints are kept at least an inch apart from each other; another roller is applied outside the splints, and its outside well starched; if necessary, temporary wooden splints, or sand-bags, are used to keep the limb in position until the case is dry. As soon as this takes place (in twenty-four or forty-eight hours) it is slit up with scissors or knife, upon a director, between two of the pasteboard splints. This admits of the limb being daily inspected, if needful, when it can be re-arranged by rolling a plain bandage outside, or by tapes attached to the case. If the case be too tight or too loose, it can be padded or pared accordingly. The evaporation which occurs during drying seems to keep down inflammation, as also does the even compression of the limb, and spasm is impossible. This casing is best applied as soon as possible after the injury. There is no question that perfect and immediate apposition of the fragments, with even support, prevents inflammation and excessive subcutaneous effusion; and if we wrap the limb well in cotton, and apply the bandages quite evenly, there is no danger of strangulating it. By leaving the nails uncovered, and pressing on them occasionally, we have a ready and unfailing evidence of the state of the circulation in the extremity. I have, however, never had occasion to relax the bandages before the case was dry, although I have repeatedly put up fractures in this way in a couple of hours after the accident occurred. Still, if the circulation appears impeded, or if the patient complains of pain, it will be safer to relax the apparatus than to run any risk of sloughing or gangrene.

Of the applicability of this mode of treatment in compound fracture, I have had too limited an experience to speak with certainty; there is, however, no difficulty or danger in applying it when the fracture is such as will probably become simple by the union of the wound in the soft parts; and in such a case it will aid in bringing about this result.

In fracture of the patella it is very useful, and it is only necessary to strengthen the *lateral* splints by a second layer of pasteboard. It is evident, of course, that the lateral splints prevent motion in the antero-posterior direction, and the anterior and posterior splints prevent lateral displacement. Inattention to this simple mechanical fact may lead to disappointment.—*Boston Med. & Surg. Journal.*

SOME EXPERIMENTS ON THE SMOKE OF TOBACCO.

In Froriep's *Journal*, of a recent date, an interesting article has been published on the habit of tobacco smoking, and on poisoning by nicotine. Amongst the facts there mentioned, are the experiments instituted by M. Malapert, a pharmacien of Poitiers. His intention was to ascertain the exact quantity of nicotine absorbed by smokers, in proportion to the weight of tobacco consumed.

The apparatus used consisted of a stone jar, in which the tobacco was made to burn, connected with a series of bottles communicating by tubes. The bottles were either empty, or contained some water mixed or not with a little sulphuric acid. From a few experiments, it was found that, in the smoke of tobacco extracted by inspiration, there is ten per cent. of nicotine. Thus, a man who smokes a cigar of the weight of seventy grains, receives in his mouth seven grains of nicotine mixed with a little watery vapour, tar, empyreumatic oil, &c. Although a large proportion of this nicotine is rejected, both by the smoke puffed from the mouth, and by the saliva, a portion of it is nevertheless taken up by the vessels of the buccal and laryngeal mucus membrane, circulated with the blood, and acts upon the brain. With those unaccustomed to the use of tobacco, the nicotine, when in contact with the latter organ, produces vertigo, nausea, headache, and somnolence; whilst habitual smokers are merely thrown into a state of excitement, similar to that produced by moderate quantities of wine or tea.

From further investigations it is found that the drier the tobacco the less nicotine reaches the mouth. A very dry cigar, whilst burning, yields a very small amount of watery vapour; the smoke cools rapidly, and allows the condensation of the nicotine before it reaches the mouth. Hence it comes that the first half of a cigar smokes more mildly than the second, in which a certain amount of condensed watery vapour and nicotine, freed by the first half, are deposited. The same remark applies to smoking tobacco in pipes, and if smokers were prudent, they would never consume but half a cigar or pipe, and throw away the other. Smoking through water, or with long tubes and small bowls, is also a precaution which should not be neglected.—*London Lancet.*

ON THE ANTHELMINTIC ACTION OF THE SULPHATE OF QUINIA.

BY DR. PROSPER DELVAUX, FELLOW OF THE FACULTY OF MEDICINE
OF THE UNIVERSITY OF BRUSSELS.

During the last three years, I have proved the efficacy of sulphate of quinia as an anthelmintic. Some days after the administration of this salt in the intermittent fevers of children, the parents came to announce to me the cure of the fever; but in a great number of cases, the little patients had had motions, followed by the expulsion of intestinal worms.

Thenceforth I asked myself, if sulphate of quinia had not anthelmintic properties? I then gave it to children affected with worms, and my trials were crowned with success. Every time that I made use of this salt as an anthelmintic, it produced this effect, which I have verified in a great number of cases.

So early as 1764, Professor Van Doeveren, of Groningen, reported two very interesting observations on the anthelmintic property of Peruvian bark.

The first case was that of a child, aged 12, affected with *tænia*. Purgatives, calomel, assafoetida, &c., had been tried but in vain. At last, an ounce and a half of Peruvian bark was given in four days. After having taken the powder, the patient passed an entire *tænia* with the head.

In the second case, the patient was a young girl, laboring under fever. She took an ounce of powdered Peruvian bark, made into an electuary with simple syrup. Three round worms were expelled.

In a great many cases, adds Van Doeveren, physicians have given this febrifuge with the single idea of subduing fever, and without having the least suspicion of worms, and nevertheless it has brought them away. Heister combined bark with mercury in his anthelmintic electuary, probably because he suspected the vermifuge power of the former.

I have collected upwards of forty cases of children affected with lumbricoid ascarides who have been radically cured of this affection with sulphate of quinia. The salt usually produces, at the end of twenty-four or thirty-six hours, several liquid motions containing these entozoa.

The sulphate of quinia is also most effectual in removing the ordinary ascarides (*oxyures vermiculares*.) As is well known, these parasites are lodged in the *fæcal* matters in the rectum, sometimes in the colon. They appear to imbibe a remnant of the chyle which serves to nourish them. They are expelled in a ball (*peloton*) with the *fæces*, or escape by themselves, causing intolerable itching, tenesmus, and other annoyances.

Injections of sulphate of quinia, repeated every evening for a certain time, are capable of completely destroying these entozoa.

I had twice an opportunity of administering sulphate of quinia for *tænia*, and in both cases the worm was expelled and was not reproduced. The first case occurred in October, 1854, and was that of a

widow, aged 28, who had suffered for many years from a tænia of which she was constantly passing one or more segments. Every known anthelmintic had been administered, without completely freeing her from her malady. After having taken about forty-six grains of sulphate of quinia, she voided several yards of a tænia, the characters of which corresponded with those of the *bothriocephalus latus*. The medicine was continued for some time, and she has ever since enjoyed good health, and has had no return of the worm attacks.

The subject of the second case, dating from the month of March, 1855, was a little boy, aged four, who, according to the report of the parents, had been, from the time he was one year old, in the constant habit of passing entire ells of a large, flat worm, which I recognized to be the *tænia lata*. Sulphate of quinia was exhibited, a worm twenty-nine and a half feet (nine metres) in length was expelled, since which there has been no return of the affection.

Sulphate of quinia is, therefore, truly an anthelmintic. The physician often meets debilitated, sickly young children, whose constitution bears the stamp of the most profound asthenia. He generally shrinks, when these children are at the same time attacked with worm affections, from the long list of anthelmintics, which, most frequently, only act on the digestive tube by producing violent effects, which are often felt injuriously throughout the entire system.

It is in such cases, especially, that the sulphate of quinia is advantageous, and I have never seen its employment followed by unfavorable consequences. Sulphate of Quinia produces its vermifuge effects in virtue of its bitter properties; for bitters, as is well known, act more energetically as poisons on animals, in proportion as the latter are lower in the scale of creation.

Is it not on account of their bitter properties that Celsus and Cœlius Aurelianus extol worm-wood and centaury as anthelmintics, and that Riviere (*Praxis Medica*, Book v. chap. 9) praises the same and other plants as vermifuges, and as especially efficacious in removing lumbricoid ascarides? Kluyskens, in his treatise on "*Materia Medica and Therapeutics*," says that "bitters are very detrimental to worm" "It is a very curious fact," observes this writer, "that vegetable bitters should in general be so destructive to inferior animals; flies perish almost immediately on being wet with an infusion of quassia."

It is, therefore not impossible that sulphate of quinia should be capable of killing intestinal worms. Moreover, by its tonic action, it restores the power of the digestive organs, debility of which strongly predisposes to the production of entozoa.

Doses, and mode of administration.—The dose of the sulphate must vary according to the age of the patient; from two to ten years, it will range between three and six grains; in older persons, so much as nine grains may be given in the twenty four hours. When the medicine has produced the desired effect, the dose ought to be gradually diminished. During its administration, the diet should be light. It is seldom necessary to have recourse to aperients; it may, however, occasionally be advisable to administer castor-oil or syrup of rhubarb.

The following formulæ for its exhibition have been employed: *Powders*.—Sulphate of quinia, half a scruple; sugar, as much as may be sufficient; divide into six powders. *Pills*.—Sulphate of quinia, half a scruple; honey, marshmallow powder, of each, as much as sufficient; make into six pills. *Electuary*.—Sulphate of quinia, from three to six grains; purified honey, two ounces; mix; a teaspoonful to be taken frequently. *Syrup*.—Sulphate of quinia, from three to five grains; syrup of orangepeel, ten drachms; a teaspoonful to be taken at a time, and frequently repeated. *Enema*.—Sulphate of quinia, five or six grains; dilute sulphuric acid, as much as may be sufficient; distilled water, eight ounces.—*Presse Medicale Belge*, April 15, 1855.

EDITORIAL AND BOOK NOTICES.

The vacation by Professor Andrews, of the chair of Comparative Anatomy, in the University of Michigan, and his subsequent removal from the State, devolve upon the undersigned the necessity of assuming the editorial charge of *The Peninsular Medical Journal*, which was called into existence by his enterprise, and sustained during the first year of its existence, solely by his energy and ability. Although the editorial force has been, since that time, numerically quadrupled, we do not expect to enter upon the management of it with a more exalted purpose in view, or to manifest a warmer zeal in the cause to which it is devoted, or to exhibit a higher order of talent than it was the good fortune of our worthy predecessor to possess, and employ in its service.

At its inception, the *Journal* was to serve as a channel of communication between the Medical Faculty of University and the great body of the profession in the State, whose cordial co-operation we deem essential to the stability of the one and the progress of the other. The action of the State Medical Society at a subsequent period, by which it was adopted as the organ for publishing its transactions, so changed its relations to the University, that at its birth, it became what we design hereafter it shall continue to be, the exponent of correct medical opinion, the channel through which the members of the State Society and other affiliated bodies may give expression to their sentiments, repository of their transactions, and a place where the more solitary laborer may put on file the results of his observations and researches. By means of its original articles, and the judicious selections which our exchanges will enable us to make, we hope the *Peninsular Journal* may become, not only a fountain of intelligence,

but also a distributing reservoir, through which its readers may receive early and correct notices of scientific discoveries, which relate to our profession, of novel applications of principles already established or of remedies already known. We shall endeavor to give prompt and early, and impartial notices of new works, when submitted to us by the publishers, as they come from the press, now teeming with productions, on the subject of experimental, practical and recondite medicine. By uniting our energies, combining our resources, and working assiduously for these ends, we hope to achieve that degree of success which shall relieve the Journal from pecuniary embarrassments, and attain to such a degree of respectability as will command the confidence of the profession at home, and the respect of its cotemporaries abroad.

The columns of the Journal will be open to all whose productions are manly in style and orthodox in tone, whether the opinions of contributors meet the personal views of the conductors or not, so long as no violence is done to the courtesies of professional life, or the general principles of medical ethics.

Although not holding the position of censors, the conductors feel that their duty as journalists requires them to exercise a degree of vigilance in regard to passing events, not expected of others who hold a different relation to their fellows in the profession, and to the public. In the discharge of this duty, they will endeavor to keep their readers advised of the progress rational medicine is making, of the instrumentalities by which it makes its advances, of the transactions of medical societies, of the efforts made by the medical schools of the United States, to elevate the standard of medical education, of the attainments required of their pupils as prerequisites to admission to their privileges, and of the conditions with which they must comply before attaining the degree of doctor in medicine.

Whilst urging medical reform, and recording the advances made in the science, as well as the art of healing, we shall strive to hold on to the wisdom of the fathers, lest we be found practising the egotism of a race of politicians, whose title to present distinction consists in the audacious ignoring of the labors of their ancestral superiors.

To make the Journal a self-sustaining affair, we need an increase in our number of subscribers and a more prompt remittance than heretofore on the part of those who are delinquent of the amount due on their subscriptions. Our object in engaging in this enterprise has not been to make money. If we can fraternize the profession in the State, and evoke such a manifestation of its *esprit du corps* as will

enable it to wield the moral power it is entitled to exert in the community, without drawing too heavily upon our private resources, we shall have fulfilled our mission. With that we shall be content.

We reiterate Professor Palmer's expressions of good-will to his retiring colleague, because of the pleasure it affords us to do so; and take this occasion to say to his new associates, that few men possess a clearer intellect, and none a truer heart than they will find in the bosom of the alumnus they have snatched from the University of Michigan. The benediction of his alma mater follows him. ED.

DETROIT, November, 1855.

THE NORTH-WESTERN MEDICAL AND SURGICAL JOURNAL ON
MEDICAL REFORM.

The October number of the above named Journal contains an editorial article on medical education, in which it is ably shown that the courses of lectures in the Colleges should be extended to *eight* months, and divided into two parts; the first half being devoted to the primary branches, and the last to the practical. It is very justly contended that this will afford time for a far more deliberate and ample discussion of the various branches of the science, and consequently of impressing a knowledge of them much more strongly upon the mind. The plan has also the advantages of presenting fewer subjects at the same time, thereby avoiding confusion, and of having the different branches, as far as is practicable, presented in their natural order. The article also urges the importance of "preliminary education," but seems inclined to throw the responsibility of its being required upon private preceptors rather than the schools, a thing, by the way, which cannot be done. Although every physician receiving a student into his office is in a degree responsible for his possessing proper qualifications, yet with the schools, as they assume to decide who shall enter the profession, must ever rest the chief responsibility in this matter.

When the North-Western Journal first passed under the control of its present editor, we expressed the hope, founded upon his antecedents, that we should find in him an efficient colaborer in the great work of Medical reform;—and we rejoice at this indication of his returning to his first love, notwithstanding his being wedded to a school which has presented so little evidence of advancement.

We have long been of the opinion that an eight months term of lectures in the schools divided as above stated is what is now needed in this country; and we are strong in the conviction that the school which first takes such a position, though it may be a mark for the shafts of envy, will not only advance the cause of medical education, but will cover itself with a glory which will not fade. A. B. P.

TO THE MEMBERS OF THE MEDICAL PROFESSION IN CANADA,
EAST AND WEST.

We presume that the physicians residing in the British Provinces, conterminous to the United States, are already aware of the existence of an organization in these States, known as the "*American Medical Association*;" and that it is an itinerating body, which holds its annual sessions in successive years in different States of the Union. But as we may not presume that they are informed of the act of courtesy extended to them by a resolution of the Association in May last, or that its next meeting is to take place in Detroit, on the first Tuesday of May, 1856. This circular notice is issued by the Committee of Arrangements, for the purpose of extending to them a cordial invitation to meet with their brethren of the United States, on that occasion.

The Constitution of the Association provides for the admission of members, as follows:—1st by presenting their credentials as delegates from Medical Societies, Medical Schools and Hospitals: 2d, by the admission of delegates as "permanent members," on stipulated conditions; and 3d, by the introduction of "members by invitation," who may participate in the proceedings of the Association, during the session they are invited to attend. As the physicians of the Canadian Provinces would not be entitled to seats as delegates they are earnestly and affectionately invited to come as "members by invitation," without limitation as to number, to participate in the proceedings of the Association, and the hospitalities of the citizens of Detroit.

DETROIT, Oct. 19, 1855. Z. PITCHER, Ch'm. Com. of Arr.

COLLEAGUES.

MOSES GUNN, M. D.	MORSE STEWART, M. D.
G. B. RUSSEL, M. D.	PETER KLEIN, M. D.
A. L. LELAND, M. D.	J. A. BROWN, M. D.

At the recent meeting of the American Medical Association held in the city of Philadelphia, it was unanimously resolved, "That the Medical Profession of the British Provinces be invited to meet with A. M. Association, at its next sitting in the city of Detroit, the first Tuesday in May, 1856, under such regulations as the Committee of Arrangements should deem proper."

In view of this resolution, the Committee of Arrangements have issued the foregoing CIRCULAR. We would therefore respectfully request that the Medical Journals, and all newspapers circulating in the Provinces, who may receive a copy of the above circular, to publish the same, in order that the information be generally distributed.

DETROIT, Oct. 20, 1855.

WM. BRODIE, M. D.
Sec. A. M. Association.

 BACKING OUT UNGRACEFULLY.

It will be remembered that some months ago we exposed the ridiculous misstatements of the editor of the *Scalpel*, respecting the appointment of a professor of Homœopathy in the University of Michigan, and also, various other false and disparaging insinuations which he uttered respecting the institution and those connected with it. In the July number he says: "The editor of the *Peninsular Journal* will please accept our thanks for his compliment, and humble apology for our naughty announcement that they had appointed a professor of Homœopathy in the Michigan University," and then puerilely recommends, without the slightest wit or point, that we be appointed to that chair. It is marvelous to behold out of how small a hole one pretending to the proportions of a man can crawl when necessity and his nature impels to the effort. We, perhaps, ought to express our obligation to this very compressible editor for his curious, though rather disgusting exhibition.

 BOOK NOTICES.

AMERICAN ECLECTIC OBSTETRICS; by John King, M. D., Professor of Obstetrics and Diseases of Women and Children, in the Eclectic Medical Institute of Cincinnati, Ohio., &c.

This is a book of considerable merit, and exhibits also an immense amount of pretension; claiming to be cis-atlantic in origin, whilst every page bears the fruits of foreign labor; and asking to be treated respectfully as an eclectic production, whilst it is, in fact, the exponent of a sect who started into being to take the place of worn out Thom-isonianism, and now, because of their present approximation in many respects to a correct medical standard, arrogate to themselves the exclusive merit of having enlarged the field of knowledge, and increased the resources of art, by the discovery of new laws and the addition of new remedies, to a plethoric materia medica. Had the author candidly admitted his design to have been, to draw from the fountains open and accessible to all, such an amount of elementary learning and practical precept as he should find necessary to use in the construction of a text-book, like this, fitted to elevate and improve the votaries of his peculiar clique, there would have been no room for complaint. We hold that it is the right of every man to write a book if he chooses to do so, but question the morality of his attempting to dispose of it under false pretences. For such we regard the act of writing from

its original import, so honorable an appellative and of dwarfing its meaning, so that it shall only cover the ground occupied by a set of sharpers who live upon the ignorance, and fatten upon the credulity of their fellow men.

The book remarkably exemplifies the difference between producing and educating good. It may, notwithstanding, be read with advantage, and will no doubt do good service to that class for whom it is especially intended. The style of the author is respectable, though not of the most elevated order, and the typographical execution of the volume is highly creditable to the publishers, MESSRS. MOORE, WILSTACK, KEYS, & Co., of Cincinnati.

To show that we are not captious in our remark that its claims to nativism are not very well founded, we will add, that on looking over the first two hundred pages of the book, which are devoted to the anatomy and physiology of the female genitalia, to the development of the foetus and the diseases of pregnancy, we find among others reference to the following names: — M. Bouvier, Coutouly, Stark, Baudeloque, Mead, Boivin, M. Simeon, Stein, Prof. Van Huevel, Morecau, Cazeaux, Morgagni, Chaussier, Cruveilhier, Coste, De Graaf, Gendrin, Pauchet, Raciborski, Lee, Bischoff, Montgomery, Sir Everard Home, Velpau, Burns, Prof. Meigs, and Dr. Dewess.

The remaining five hundred pages, which are devoted to the consideration of labor, and the sequelæ that may follow, although dignified by the same kind of references are not entitled to the approbation we have bestowed upon the preceding part of the work. Here the peculiarities of the order begin to become conspicuous. Henceforth we read of Red Root, Blue Cohosh, Fireweed, Calcined Deer's horn, Gelseminum, &c. We can refer but briefly to the practical details which occupy the remainder of the volume. In speaking of the treatment of Puerperal Fever, the author asks, "what benefit can any thinking man consider to be the consequence of excessive bleeding, when, at farthest, but only one out of every four patients, is saved?" To fulfill the indication for which this remedy is so generally used by the best authorities, our author relies upon the tinct. of Gelseminum, Capsicum and Lobelia.

His plan of treating that state of anæmia, which results in *nursing sore mouth* is stated thus: — "In the severe or obstinate cases, and if the strength or condition of the patient will admit, an emetic must be given and repeated every three or four days; and it should be continued as long as the symptoms of the case, and the obstinately torpid condition of the liver require. The emetic I prefer is the compound

powder of Lobelia." Afterwards he administers the muriated tinct. of Iron.

We will make no comments on these extracts ourselves, leaving our readers to form their own judgment of the intrinsic value of a work of which such extracts constitute the staple, contenting ourselves with adding what follows, from the learned old Burton, as being peculiarly appropriate at the present time, and applicable to the present case:

"'Tis most true, *tenet insanabile multos scribende cacæthes* and there is no end of writing of books, as the Wise Man found of old, in this scribbling age especially, wherein the number of books is without number, (as a worthy man saith,) and presses be oppressed, and all out of an itching humor that every man hath to show himself desirous of fame and honor, (scribimus indocti doctique,) he will write, no matter what, and scrape together it boots not whence. * * * As apothecaries we make new mixtures every day, pour out of one vessel into another; and, as those old Romans robbed all the cities of the world to set out their bad sited Rome, we skim off the cream of other men's wits, pick the choice flowers of their tilled gardens to set out our own sterile plats. * * * 'With us in France,' saith Scaliger, 'every man hath liberty to write, but few ability. Heretofore, learning was graced by judicious scholars, but now, noble sciences are villified by base and illiterate scribblers,' that either write for vain glory, need, to get money, or, as parasites, to flatter and collogue with some great men, they put out burras, *quisquillasque ineptias*." Z. P.

We have received from the author, a copy of a pamphlet entitled a DISQUISITION ON THE ANCIENT HISTORY OF MEDICINE, comprising critical notices of the origin of medical science, its vicissitudes in the remotest times, and of its reconstruction by the Greeks. By Thomas L. Wright, M. D., Cincinnati.

We have not time, before going to press, to give the above an examination. It can be obtained of H. W. Derby, Cincinnati, Ohio, McCandliss & Miller, and Hartley & Son, Belfontaine, Ohio. Price 25 cents a single copy.

REESE'S MEDICAL LEXICON, from the press of Samuel S. & Wm. Wood, New York, 1855; 2d edition.

In the words of the preface, "it is simply as a vocabulary of definitions that the present vade-mecum is commended to the profession and public without any claim of novelty or other merit, except convenience, brevity, simplicity and accuracy. It cannot fail to be useful as a help to students and junior practitioners." W. B.

A MANUAL OF CLINICAL MEDICINE AND PHYSICAL DIAGNOSIS; by P. H. Tanner, M. D., &c., &c., to which is added the Code of Ethics of the American Medical Association. Philadelphia, Blanchard & Lea, 1855.

This is a very comprehensive and readable work; such an one as could be taken up at any time when the mind requires relaxation from the arduous and laborious duties of our profession. The object of the author is to lay down such rules for observation in the different forms of diseases as to avoid any error in a proper diagnosis, prognosis and treatment of a given case. There are also excellent rules for making post mortem examinations, and numbers of other things, in regard to which, those living in a country place are sometimes at a loss how to proceed. It is well worth a reading. W. B.

LETTERS TO A YOUNG PHYSICIAN JUST ENTERING ON PRACTICE; by James Jackson, M. D., LL. D., &c.

A very neat and tastely volume with the above title has been laid on our table by the publishers, Phillips, Sampson & Co., Boston.

When we consider from whose pen this unpretending little work has issued, when we reflect upon his long and extensive course of observation and experience, his high and noble opinion of his profession, we feel a sense of diffidence in adding our feeble praise in its behalf.

To our young brethren in the Profession we would say, *procure the book*, and mark well its teachings. The observation in letter 2d, "on conduct in the sick-room," in letter 9th, "on Cholera Infantum," and in letter 12th, "on Dyspepsia," are of themselves, each worthy an independent existence. W. B.


CLINICAL LECTURES ON THE DISEASES OF WOMEN AND CHILDREN; by Gunning S. Bedford, A. M. M. D., Prof. of Obstetrics, &c., in the University of N. Y. S. S. & Wm. Wood, N. Y., 1855.


We hope to be able soon to give the above work a critical examination. To write a book is becoming a fashionable rage amongst our young Professors, and which we are sorry to see, as in our opinion, it has a tendency to deprive the profession of the well digested observations and opinions of our Seniors, and lumbers our shelves with mere repetitions. In a typographical point of view the work does credit to its publishers. W. B.

TO SUBSCRIBERS.


Our readers will have perceived ere this that the Journal has changed in a measure its proprietors, and also its location, it being now published in the city of Detroit, to which place all communications should hereafter be addressed. We hope they will also remember that *money is the great archimidean lever* in the present age, without which, all enterprises however laudable, necessarily fail. To all those, therefore, who are in arrears, we ask respectfully, that they will forward the same at the earliest moment, as by so doing, they will greatly relieve our finances, and stimulate us to greater efforts in their behalf.

To new subscribers, we would state that we have a few complete sets on hand, should they desire to have the Journal from its commencement.

 We perceive by our *exchanges*, that the report of the committee (appointed by the New York Academy of Medicine, on "*Catheterization of the air passages*, by Horace Green,) is receiving considerable attention. We shall therefore, in our next issue, present our readers with a report on the subject, before the "Detroit Medical Society, together with our own special views, as we deem the subject of much professional interest, and one that ought to be settled.

 We had just taken our pen to inform our readers of the retirement of H. D. Bulkley, M. D., from the editorial chair of the *New York Medical Times*, when we received the October number of that Journal, informing us of his return to the editorial department of the *Times*.

Dr. B. has been connected with the Journal for three years past and we wish him a pleasant and profitable future. W. B.

 In the last number of the Nashville Journal of Medicine and Surgery, we discovered a new form of disease, which we truly hope and trust we may never be affected with. We confess in all our experience never to have met with a case of the kind. Messrs. Editors, will you give us the symptoms? The case is as follows:

Died, in Richmond, Virginia, Professor Bohannon, of OBSTETRICS, aged 68.

OBITUARY OF DR. BARTLETT,

It is with pain we announce to our readers the death of Professor Elisha Bartlett, at his residence in Smithfield, Rhode Island, July 18th, at the age of 51 years.

Dr. B. had long suffered from a painful nervous affection of the lower extremities, which at times deprived him of all social enjoyment, and at last compelled him to retire from all active employment. We well remember the pleasure and information we derived from his teaching during the spring of 1849, at Woodstock, Vt.

While suffering from his severe neuralgic affection, he was at times compelled to seek relief from opium, and while under its influence, he took occasion to describe the peculiar properties of that drug. The eloquence that fell from his lips at that time, will never be forgotten by those who were his listeners.

Dr. Bartlett, at the time of his death, held the Professorship of *Materia Medica*, in the College of Physicians and Surgeons of the State of New York, and which now mourns his early death. Dr. B. was well known to the profession by his contributions to the journals, but more especially by his work on *fevers*, which has received the commendation of the highest medical authorities in our country, as a teacher in the department of his choice he had no equal—at once, thorough and concise, he laid the subject open to the comprehension of the dullest intellect, and such was the purity of his diction, the suavity of his manners, that he never failed to encircle himself with the love and esteem of all his pupils.

But our space forbids us to say further, than “truly a good and eminent man hath gone.”

B.

OBITUARY OF P. C. GOOCH, M. D.


It becomes our melancholy duty to record the decease of P. Clairborn Gooch, M. D., of Richmond, Va.

Dr. Gooch had returned a second time to assist his medical brethren in Norfolk and Portsmouth during the prevalence of the present epidemic of yellow fever in those cities where he was stricken by the “fell destroyer” in the prime of manhood.


We had the pleasure of his acquaintance at the late meeting of the A. M. Association, at Philadelphia, when he expressed the great delight he should have in meeting us again in the city of Detroit. At


the fifth annual meeting of the A. M. Association, held in the city of Charleston, Dr. Gooch was elected one of its Secretaries, which office he held for two years.

Says the Stethoscope: "Dr. Gooch was just entering upon the career of mature manhood, possessed of decided talents and unusual energy of character, he had before him the prospects of fame and fortune. As a physician, he had a high appreciation of the dignity and duties of his calling, and was a zealous co-worker for the maintenance of its respectability and progress." W. B.


 We have received the first number of the Atlanta Medical and Surgical Journal, published in Atlanta, Georgia, and edited by Joseph P. Logan, M. D., and W. F. Westmoreland, M. D. It has for its motto, "Peace and Science, but Truth without Fear."


We wish our co-laborers success in their undertaking, and cheerfully add the Journal to the list of our exchanges. W. B.

 We would call the attention of our readers to the advertising sheet of this Journal. Purchasers in their respective lines of business, cannot do better than give them a call, where they may find not only goods, as represented in quantity and quality, but gentlemanly and obliging attention.

 The Medical Department at the Michigan University, appears to be in a highly flourishing condition. There are already one hundred and forty students in attendance.

CORRECTION.—In the last number of this Journal, in page 156, line 14, for plexes, read flexus. Page 159, read Sulph. Quinia, gr. xx., Sulph. Acid, Dil. q. s.; Tinct. Tilihonae Syr. Rhei. aa ꝑii.

 We have received from Blanchard & Lea, several publications too late for notice in this number.

 See advertisements of Phillips, Sampson & Co., on the cover.

MISCELLANEOUS.

OPIUM IN THE TREATMENT OF CHRONIC ULCERS.

BY MR. SKEY.

Opium produces a certain effect on the chronic and callous ulcer ; if it answer here, it will in other diseases, having the special character of the chronic ulcer. The pharmacologists tell us it is a stimulant and sedative? What do you understand by the stimulating properties of opium? I should be at a loss to call to mind any case in which it is given as a stimulant, unless in such as these. In nineteen out of twenty instances it is employed as a sedative, as, for example, in relaxed bowels, and to promote sleep. I can show you it possesses other properties quite equal to these; it prevents sleep sometimes; when taken continually it tranquilizes, but it will not always produce sleep. What is the action of opium to which I allude?

Whether it acts on the center or the periphery, whether on the heart or capillaries, I do not know. But this I do know, that it promotes a healthy action on the capillaries of the body, and in cases of chronic ulcer, which I select as an example, you will have a local action set up, which will heal a wound — will set up a healthy granulating surface and completely heal it up in a short time, when every other method has failed to do so. What is the condition and character of a chronic ulcer? A chronic ulcer is an excavation, for the most part, affecting the limbs of old people, generally the inner side of the lower limbs; two processes are going on, the formation of a ring of organized lymph which encircles the excavation, thus hollowing it to a considerable depth, and its surface is covered with unhealthy lymph. This is common to all of them; the elevation of the margins is not a specific manifestation, as it is common to other forms of ulcer. Under the microscope there is a granulation to be seen, there is an ichorous discharge, with an offensive fœotr arising from it, and yet there is no sensibility, no annoyance nor suffering to the patient, it goes on for year after year without any change; you may strap it, there is no change produced. I give opium, what does it do? It seems to start the capillary system all over the body, particularly in the lower extremities; it produces a genial glow, which may be compared to that of a cold bath, with a meal in the stomach, with or without perspiration, it makes no difference; well then, the glow is produced by the opium, and healthy granulation over the whole surface of the ulcer will become apparent in a week. What is the sum of the actions of opium? You say it is unhealthy. It is not; it promotes warmth, the pouring out of healthy secretions, it produces healthy integument, healthy granulations, it absorbs the unsound around it, and, while the granulations are coming up, the elevations are going down. That cannot be considered unhealthy which promotes health.—*Western Lancet.*

CHLOROFORM IN COLIC.

BY M. ARAN.

M. Aran states that repeated experience convinces him of the great value of chloroform given internally, as a curative agent in colic, employing it also externally until the acuteness of the pain is somewhat subdued. No absolute dose can be laid down; for, while cases of medium intensity may require but 60 drops per diem, severe ones may require from 100 to 300 drops. A portion is given in water, suspended in mucilage, and about a third of the quantity in one or two lavements. The entire quantity should be given in divided doses, as the effects are soon dissipated. From the second, or more rarely the fourth or fifth day, the colic is relieved, but a less quantity of chloroform must be continued until stools are re-established, which will usually be the case spontaneously when food is given. In 21 cases only 3 required the use of purgatives. Still, in severe cases, the duration of treatment is abridged, the relapse rendered less probable, if the first success of the chloroform be followed by a dose of castor oil or seidlitz water. In chronic colic, occurring in persons who have often had the disease, and where obstinate constipation is accompanied by moderate pain, chloroform is of no avail, active purging alone succeeding.—*Southern Journal of Medical and Physical Science.*

SLOW POISONING BY COPPER.—Dr. Corrigan reports (*Dublin Hospital Gaz.*) several cases of poisoning by copper, which are remarkable for the extreme slowness of progress resulting from the gradual introduction of the poison. In many instances it was the result of handling old or dirty copper, on which the carbonate had been formed. It was the carbonate from which the poisoning proceeded, and in this there is an analogy with the salts of lead. He notices a peculiar feature in these cases, viz: an edging of rich purple on the margin of the gums, of the incisor, canine, and bicuspid teeth of both jaws. This purple color corresponds, in situation, precisely with the coloring produced by lead, but the tint of color is so different as to decide at once whether it has proceeded from copper or from lead, for, while the color produced by lead is of a pure blue, that from copper is a well-marked purple, and even, sometimes, a reddish purple.—*N. Y. Dental Recorder.*

PREPARATIONS OF THE AMERICAN CHEMICAL INSTITUTE, N. Y.—E. S. Wayne, Cincinnati, has published in the *American Journal of Pharmacy*, edited by Prof. Proctor, Jr., of Philadelphia, a statement that he had analysed 18 specimens of the products of the American Chemical Institute, called resinoids and alkaloids, and found only four of them to be as represented. Physicians cannot be too particular in ascertaining the fact that their patients really get what they prescribe.

These analyses proved, however, another thing; the preparations were truly *alkaloid*—for 25 grains of some of the specimens yielded as much as 21.25 grains of *carb. magnesia*.—*Nashville Journal of Medicine and Surgery.*

HYDROPHOBIA IN FRANCE.—From an inquiry instituted by the French Government, it appears that, in 1852, no less than forty-eight cases of hydrophobia occurred in France, these being distributed over fourteen Departments. Returns are now ordered to be made every year; and one consequence of drawing attention to the subject has been the inundation of the Government with infallible specifics. These have been handed over to the Academie de Medicine for examination, and M. Bouchardat, in a recent report, exposes their ridiculous pretensions. He observes that there is not one of those recipes which has not at some former epoch been brought forward, and allowed to fall into deserved oblivion. The authors of these communications must also be edified at learning that the *arcana*, which they flattered themselves they alone possessed, reach the Government by different channels, and are, indeed, traceable to quite the infancy of art.—*London Lancet*.

IODINE IN FIBROUS TUMORS OF THE UTERUS.—We observe that Dr. West almost invariably orders, for those of his patients at St. Bartholomew's, who are the subjects of fibrous tumors of the uterus, a long course of one or other of the preparations of iodine. The following is the prescription which was ordered for a middle-aged woman, who applied with that disease on Saturday: Potassi iodidi, gr. j.; syrupi ferri iodidi, m. xx.; aquæ carui, ℥ss. Ter die sumend.

Dr. West remarked at the time, that were the patient one in the highest ranks of life, she would be just the one likely to be benefitted by being sent to drink the Kreuznach waters (which contain iodides, and also bromides.) In common with Dr. Rigby, and other physicians, Dr. West entertains a high opinion of the value of the iodides in procuring the diminution of these tumors.—*London Med. Times and Gaz. Boston Med. and Surg. Jour.*

INSANITY TREATED BY QUININE.—M. H. Legrand du Saulle communicates a case of insanity of a double form, treated successfully by sulphate of quinine. The patient, a female of 34 years, and the mother of a family, had been subject to periodical attacks of religious melancholy, lasting for six days, and then succeeded by furious mania, lasting about the same length of time, and which, upon passing off, gave place to an interval of 11 days, during which the health, intellectually and bodily, seemed complete. The sulphate of quinine was prescribed, and continued, without interruption, from March 3d until April 10th, gradually increasing the dose from 4 grains to 2 scruples. At the usual period for the accession of the melancholy, only a slight dullness appeared, and for three years the affection has not returned.—*Annales Medico Psychologiques, and Ibid.*

THE EPIDEMIC AT NORFOLK.—We have had the pleasure of a conversation with Dr. Warren Stone, of New Orleans, who, on his way north, visited Norfolk. His opportunities for studying yellow fever have been abundant for more than twenty years, and he has used them diligently. He believes, if we did not misunderstand, that yellow fever is a specific disease, occurring but once ordinarily in the same person, and with none of the characteristics of contagious diseases. At Norfolk he investigated the statement that it was imported by the steamer Ben Franklin, and found that there were cases of the disease in the city before the Franklin broke bulk or even arrived. Contrary to the popular belief, he maintains, and the results of his enquiries seem to prove, that the terrible epidemic in Virginia is the result of some influence unknown to us, but which has extended itself gradually from Rio Janeiro, northward. The characteristics of the disease at Norfolk are the same as at New Orleans in 1853, and Dr. Stone finds no evidence that it is a new disease or 'African fever, as it has been termed, but a severe epidemic of ordinary yellow fever.—*American Med. Monthly.*

THE RULE WORKS BOTH WAYS.—Physicians practicing surgery have frequently been annoyed and sometimes broken up by suits at law instituted against them for alleged mal-practice. In some parts of the country these suits have been decided so commonly, and with such facility against physicians, that they have resolved, before treating cases of fractures, dislocations, &c., to take a bond of indemnity from the patient as a security against prosecutions.

Lately a case has been tried before the Supreme Court of Baltimore city, in which Dr. O'Neil was plaintiff and Madison Jeffrees defendant. Dr. O'Neil had treated the said Jeffrees for fracture of both thigh bones. Before the patient recovered completely, and afterward, he circulated reports touching the professional standing of his physician, Dr. O'Neil. The latter instituted a suit against him for libel and recovered \$10,000 damages.

The case was argued with great ability. Merrick and Brent for plaintiff, Marshall and Matthews for defendant. Mr. Brent's speech is before us, and will, in whole or in part, be laid before our readers at some future time.—*Ohio Med. & Surg. Journal.*

THE PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. III.

DECEMBER, 1855.

NO. VI.

ORIGINAL COMMUNICATIONS.

ARTICLE I.

*Tuberculosis—its causes, and indications for its treatment.
Inhalation.*

BY HENRY GOADBY, M. D., F. L. S.

Tuberculosis may fairly be considered, as the opprobrium of the medical profession. The want of information in regard to this disease has opened the door to the most extensive and varied forms of Quackery—which are at this instant of time more unblushingly impudent than probably at any former period. The object of this communication is to show that the phenomena of this disease are of an extremely simple and easily understood character. I first propose in the order of sequence to consider what constitutes tubercle. It must be obvious that this question can only be answered by reference to the Microscope. And it has fallen to my lot to examine the substance of “*tubercle*” microscopically on a great number of occasions. I have never seen but one uniform result, viz: that tubercle consists entirely of the disintegrated and decomposed tissue in which it is found to be situated, whether Lung, Liver, or Intestine. In con-

firmation of this statement, that the matter of "*tubercle*" is made up of the debris of the tissue. It is only necessary to say that the field of the Microscope will be occupied with masses of the floating cell-walls, which still retain their capillary plexuses on both surfaces. So much, then, for what it really is. The next question is of the causes which have led to its production.

It invariably happens, in patients having a tendency to this disease, that the vital powers are depressed, and the circulation feeble. The heart, in fact, has not sufficient power to propel the blood throughout the capillary plexuses which eminently distinguish the tissues, the subjects of this disease. This remark especially applies to the pulmonary tissue, to which these observations will mainly refer.

In this organ, the capillaries are of less size, than any other such vessels in the human body, and complex and tortuous to the last degree. It is easy to conceive that any lack of contractile power in the heart, would fail to propel the blood through this wonderfully attenuated and difficult system of vessels. The circulation, therefore, fails to reach the ultimate capillaries throughout the pulmonary tissue, and if it fail for only a short space of time, what must be the inevitable result? Evidently, the circulation being once cut off, the part is left to die, and dying must succumb to the laws which regulate all dead matter; that is to say, it must be decomposed, and ultimately removed by absorption. In this case we are supposing that the powers of life, although depressed, are sufficiently good to carry on the process of absorption, which however, is not true, in by far the majority of cases.

Whenever a tubercle be established, either on the pleural surface of the lung, or the interior of the tissue, nature appears to do all in her power to limit its extension; the colorless corpuscles of the blood are thrown out in great abundance, to form a line of demarcation, to separate the healthy structure from the rotting mass in its immediate vicinity. And if, in the meantime, the circulatory organs have acquired the necessary amount of energy, this process will surely be effected; but if not, the tubercle as necessarily extends. This, then, is one cause of tubercle; and another is to be found in the various causes which produce inflammatory action in the pulmonary tissue. In this latter, as in the former case, the primary mischief appears to be the cessation of circulation.

If we inflame a frog's foot under the Microscope, we shall see that the capillaries are instantly engorged, the blood becomes intensely red, and the circulation entirely ceases. All due allowance should, of

course, be made for the circumstances which attend inflaming, artificially, the *web of a healthy frog*, and inflammation which results from a positive depression, and disease. In the frog, simultaneously with the inflammation thus established, there is a sudden and remarkable aggregation of colorless corpuscles to the injured part. To them is delegated the function of repair. And through their agency, resolution of the inflammation soon results, and the blood resumes its wonted channels. But, in the other case that we have supposed, the inflamed condition of the lung, the causes which have produced it, may continue, and set up such antagonism to the colorless corpuscles, as to defeat the intention of their exhibition. Moreover, the colorless blood-corpuscles may not co-exist with inflammatory action to the required extent. The too long continued arrest of the blood will render it impossible for the circulation ever to be resumed in the affected part, which is hence prepared to pass through all the phases which terminate in tubercle.

In the foregoing statements, we have supposed so slight a degree of tuberculosis, as every one is liable to, and the majority have experienced; for it is remarkable how few *thoroughly healthy lungs* I have been able to find in some hundreds of Post Mortem examinations. Neither is this a matter of any consequence, because we, all of us, possess much more lung than we have occasion to use, and can really afford to loose a great part of it with impunity.

There are cases in which the depression of the organs of circulation, already imagined, continues to exist. And the same depression precludes the possibility of absorption. In this case the *tubercle* remains, and becomes the source of further corruption by propagation.

There has been a lack of power to supply the colorless blood-corpuscles, to arrest the forming process of tubercle. Neither is it quite certain that the liquor sanguinis is provided with a sufficient quantity of these corpuscles, for this purpose, as it is obvious that depression of the organs of circulation, and impairment of the nutritive function, go hand-in-hand.

If healthy action can be established, the process of absorption becomes active, and the lung heals by *cicatrix*. I have, in my Cabinet, a preparation of lung, from a woman 85 years of age, the pleural surface of which had been the seat of an infinity of cancerous tumors. These have cicatrized, and the cicatrices have become organized, a fact fully revealed by the Microscope, the preparation having been minutely injected.

The examination of tubercle, under the Microscope, exhibits, in addition to the debris of the structure of the tissue itself, *certain nucleated cells*, emphatically so called by "Paget." The question is, what are these cells, and how do they originate? Every Microscopist knows that it is very difficult to discriminate between a corpuscle of pus, a mucous corpuscle, and the colorless corpuscle of the blood. If my view of the nature of tubercle be correct, the first result is destruction of the tissue. From this moment, the tubercle goes through a variety of phases—in a downward direction—and may be favorable for all that I know to the contrary, to the ultimate production of corpuscles of pus; and I think likely that it really is. Hence their presence is accounted for. I have already indicated that the colorless blood corpuscles are thrown out in immense quantity to limit the spread of tubercle; and surely, it is no way wonderful that they should be found extensively associated with the matter of tubercle, although their presence as such, has been overlooked by authors.

Before hinting at treatment, plainly indicated by the above facts, it will be well to make a brief resume of the foregoing statement. Firstly, we find a depressed condition of the circulation, producing death in the tissue. Secondly, the tissue dies from the arrest of capillary circulation, the result of inflammation. Thirdly, the extension of tubercle by propagation. And, fourthly, the reparation by means of cicatrization.

Reasoning from these premises, the mode of treatment seems to be indicated as follows, viz: The power of *the heart must be increased*, and to effect this, we must have recourse to stimulants; and here we must inquire what stimulants should be considered the most judicious for this purpose? It should not be lost sight of, that energy and power should be given to the heart immediately. Every minute of delay is just so much valuable time lost. To meet such a contingency, we ask again, what is the best remedy, within our present knowledge? and in my opinion, there is but one answer to this question, viz: Brandy. I believe it should be administered in doses of from one to two table-spoonsfull, mixed with a little hot water, which greatly assists its action; and that this dose should be repeated at such intervals as circumstances may direct. I believe, however, that a far better remedy would be good old, and generous port wine; by which I do not mean the infusions of Logwood, too commonly sold for that fluid; *but the genuine wines of Oporto*. When this can be obtained, I would prefer it, very much, to the brandy, the use of which is merely suggested as a substitute for the more appropriate fluid. Two or three

wine-glasses per diem, of such wine as I have indicated, would prove of immense importance; because it would, of itself, supply nearly all that is requisite. The brandy contained in it, would sufficiently act upon the organs of circulation; whilst its nutrient principles would be fruitful in supplying the colorless blood corpuscle. The wine should be taken at intervals between meals; and every attempt should be made to form as large a quantity of fibrin, and albumen, in the liquor sanguinis as possible. To this end I would place the patient upon a light and nutritious diet, which should consist principally of any or all, of the many forms of *Fecula*, alternated with draughts of *beef-tea, so carefully prepared*, that a breakfast cup should contain the entire chemical elements of a pound of beef. To the latter I give the greatest importance, because it contains within itself, the very elements that are essentially requisite. The stomach may be in a condition of such debility that more than one ounce of solid meat, (if as much) would fail to be digested, and even then, at the expense of a long and difficult process. Whereas, if a larger quantity of beef be digested carefully in the oven, and its elements dissolved out of it, the patient who cannot eat enough to sustain physical wants, can drink the concentrated essence of a pound of beef at a draught. Great care and attention is necessary in the preparation of beef tea, consisting of the two chemical elements already indicated: albumen, and fibrin. The boiling point should never, under any circumstances, be reached, for the very instant it be suffered to boil, the albuminous element becomes coagulated, and the fibrous element corrugated. And whenever this takes place, the process may be suspended, for no earthly power can extract further nutriment from the meat. In my experience, the very best plan is the following: Take the lean of beef and hack, as if you were mincing it; put it into a clean sauce-pan, with just sufficient water to prevent it from burning; cover it up, and place it in an oven, so slow, that it cannot possibly boil; allow it to remain not less than from two to three hours, or longer if necessary, when a *light colored* fluid will be the result. Strain, and flavor it in any way most agreeable to the patient. The meat will be a mass of dry fibre.

I have been induced to give the rationale of beef-tea making, because I believe success depends upon the maintainance of scientific principles not generally clearly understood.

The plan of treatment here recommended, would seem to indicate a greater demand for the *cook* than the Doctor, but this is not really so. It requires the supervision and direction of a skillful Physician

to regulate the treatment, to watch its effects, to ascertain the improvement of the pulse, to attend to the general secretions; and in fine, to give such further attention to the symptoms as the necessities of the case may require. Variations in the diet will frequently be rendered necessary; for example: When the stomach is supposed to be capable of it, a mutton chop, not too much cooked, might be substituted for a cup of *beef tea*.

It will be seen by the facts adduced, that the processes of inhalation, so arrogantly put forth at the present time, can have none other good, than to fill the pockets of those who practice it. Of all the numerous class of pretenders, who affect to cure "Lung Diseases," this may justly be considered, as by far, the most *specious* humbug.

If this system of treatment have any effect at all, it must be of this kind: The air, passing through the bronchial tubes, and tubioles, ultimately reaches the air-cells. Suppose the inhaled material, possess stimulating qualities, it may, (and is certainly supposed to,) act upon the cappillaries. But what action does it produce there? If the circulation has been arrested, and the blood remains stagnant in the vessels, the utmost that can possibly result, will be the production of an oscillatory motion, such as is constantly seen in the frog's foot, which as it cannot lead to any practical result, will soon subside. Anything allied to renewed general circulation, by such agency, is altogether out of the question. The probability is, that so far from such effects taking place, as have been assumed, the action is specifically upon the *air-passages*, and not the *air-cells*.

Inhalation would be far more likely to be active on a mucous surface than on a tissue, devoid of this membrane, which is the case with the *tubioles* and air cells. As an expectorant and anodyne application, I can understand that inhalation may give relief—I only cannot believe that any permanent good is to be derived from this treatment, as a cure for tuberculosis. It must be, in the nature of things, altogether inefficient; and whatever effects it is calculated to produce, are not likely to be permanent. But whilst the patient has been coquetting with this system, valuable time has been irrevocably lost; and that disease, which, in the first instance, would have succumbed to careful, legitimate and enlightened practice, may have made such inroad as to render recovery hopeless, if not impossible.

I would not be supposed to restrict the treatment to the plan which I have laid down, because other, and equally efficacious modes of building up the body, rescuing it from a state of prostration, are patent to the profession. Cod-liver oil, in certain cases, I believe to be a rem-

edy of so much value, that we cannot sufficiently extol its merits. Years ago, on the other side of the Atlantic, I have seen several apparently incurable cases restored by the use of this remedy.

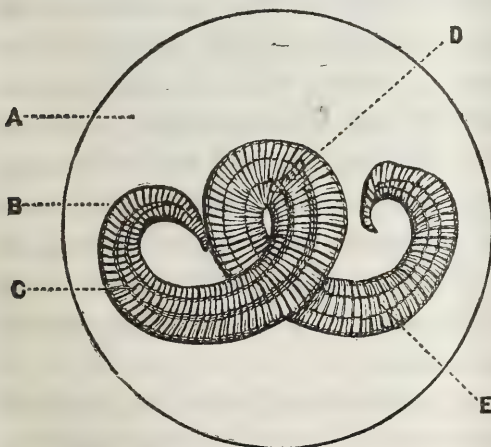
Finally, I regard it highly important to sustain the heart's action, and employ a rigid and well directed hygienic course of treatment.

Detroit, Nov. 6th, 1855.

ARTICLE II.

Parasite found in a Bat.

Dissecting a bat, recently, my attention was directed to a congeries of very minute spots in that portion of the mesentery which connects the spleen, stomach, and small intestine. Upon examining these spots with the Microscope, I discovered them to be Cistoid Entozoa, *Trichina*, of a species not before figured, or described, so far as I know. With low power they very much resemble *Trichina spiralis*, found very rarely in human muscle, wanting, however, the peculiar *external* cyst, supposed to result from the irritation caused by that in which the animal is contained. With higher power they proved to be quite a different species, resembling *Trichina* only in the spiral coil which the parasite assumes.



- A, the cyst, containing
 B, the Entozoon.
 C, Stomach.
 D, Pylorus.
 E, Intestine.

By reference to the figure, it will be seen that the cyst is perfectly spherical; that the body of the animal consists of a great number of very small segments, and that it possesses a well developed alimentary canal. The stomach has a muscular coat, and mucous membrane of

much (comparative) density, and it is separated from the intestine by a very obvious pyloric constriction.

These parasites were found amongst the *fat lobules* of the mesentery, and twelve of them occupied a space less than one-eighth of an inch square. On continuing the examination of the animal, I found one cyst in the centre of the urinary bladder, and three more at its neck. When first examined, they were all alive, save one only—that from which the figure has been drawn. All of them presented the characteristic spiral form, until, by endosmose, they felt the influence of the preserving fluid; they began to writhe in a particularly sluggish manner, which continued till they died; and now I have not two which possess the like form. One has died with the coil more closely drawn, and superimposed, *i. e.* one circle lying on the other, but the majority have opened, forming a curved line with the extremities turned in.

HENRY GOADBY, M. D.

ARTICLE III.

Anatomical Memoranda from my Note Book.

In the course of a dissection of an infant, 2 years old, some years since, my attention was called by my student, to an anomaly in the arrangement of the primary branches of the Aorta. Upon farther dissection, it was found that in respect to both the number and order, a departure from the normal arrangement had taken place. Four distinct and nearly equal trunks arose from the arch, the right and left carotids being closely approximated and at the right of the arch, the left subclavian was given off near the centre, while the right subclavian had its origin on the extreme left, on the descending portion of the arch; from this point it passed backward, upward and to the right, behind the trachea and esophagus, until it gained the right side, where it gave off its regular branches. This rare anomaly, which finds no type in the normal distribution of the primary branches of the Aorta in the inferior vertebrates, does not seem to admit of facile explanation by the known laws of embryogeny.

The large size of the head having attracted my attention, the brain was carefully examined, but no trace of morbid action was found. Upon placing it in a balance, it was found to weigh 2 lbs. 9 oz. Av., exceeding, some 2 or 3 oz., the average weight of the brain in infants from 1 to 5 years old, according to the tables of Ried. The weight of the body was not ascertained.

A. S.

ARTICLE IV.

Cornin in Intermittents.

BY E. P. CHRISTIAN, M. D.

It has long been a desideratum, and consequently much enquiry and experiment have been prosecuted for that object, to obtain an indigenous remedy, offering a cheap, safe and efficacious substitute for quinine, as a tonic and antiperiodic. This desideratum arising not from any decrease of confidence in the specific virtues of quinine, nor from well grounded fears of ulterior injurious effects, resulting from its use; nor indeed from a more vague though laudable scientific curiosity; but for a more practical object—from the high price of quinine, which also creates great temptation to adulteration, and from the extent of its use rendering it often unattainable in many localities. It is also quite probable that quinine presents no exception to the general law, that a tolerance is acquired by long use, and that in such cases, much larger doses would be required, than of a different remedy, with even weaker powers. In miasmatic districts such cases abound, and are those likely to be speedily cured by indigenous plants. But this is not the only class of cases favorable for the trial of “new remedies.” In some recent cases also of mild intermittent, where no perceptible organic changes have resulted, or where the disease has not been confirmed by habit, nature often needs the aid of but a weak ally, to restore the body again to a healthy *status*.

Of the great number of indigenous plants which have been used as substitutes for quinine, possessing various degrees of efficacy by their tonic or alterative properties; the *Cornus Florida* (vulgo dogwood) appears to have been assigned the pre-eminence, and to have merited the greatest amount of confidence as an antiperiodic. Prior to the separation of the alkaloid quinine from Peruvian bark, the bark of the *Cornus Florida* was commonly used in intermittents, &c., but after the discovery of this alkaloid, its superior efficacy pretty much drove the former out of use, except in domestic practice, or in localities where the latter was unattainable. According to Eberle, thirty-five grains of the bark of the *Cornus Florida* are about equal to thirty of *Cinchona*, showing no great disproportionate powers. Dr. Jno. M. Walker, says that the bark of this tree differs very little in chemical composition from the Peruvian bark, and that, in their operation on the system, these two articles possess a close resemblance. Its sen-

sible properties, too, are very similar to those of Cinchona; according to the same authority, it has a bitter, astringent and slightly aromatic taste. Its astringency is, however, stronger than that of Peruvian bark. Dr. Walker's analysis obtained only gum, resin, tannin, gallic acid, and extractive matter. Subsequently, Dr. Carpenter announced the discovery of a peculiar better principle in it, which he called cornine, but does not appear to have obtained it in sufficient quantity to test its therapeutic efficacy. More lately a resinoid, so called, has been obtained from it at the American Chemical Institute of New York, called cornin, which possesses in an eminent degree the remedial powers of the bark. Whether it contains an alkaloid of still greater efficacy, has not yet been determined. But from the analogous composition of other plants of the same therapeutic nature, for instance, the *Hydrastis Canadensis*, an excellent tonic and antiperiodic, which affords both a resinoid and alkaloid, (the hydrastin and hydrastine) from the similarity of this latter to quinine both in chemical composition and in therapeutic effects, and from the similarity in chemical composition and therapeutic effects between the bark of the *Cornus Florida* and the Cinchona, we may hope that such a principle may yet be eliminated. The cornin prepared by the American Chemical Institute, they assert, is as reliable as two-thirds of the quinine of the shops. However, they do not accredit to it equal powers with the hydrastine, concerning which they use this eulogistic and extravagant language, "that this agent as an antiperiodic tonic is without an equal in the materia medica, if we except sulphate of quinia." Our own experience has led us to an entirely different opinion, that, as an antiperiodic tonic this medicine is superior to hydrastine, and is excelled only by quinine, and by no indigenous remedies so far as we have tried. We think that in a great number of cases of ordinary intermittents, it will prove equally as efficacious as quinine; in a smaller number, perhaps more so; that but very few cases will fail to yield to it, with somewhat more persevering use than would be required with quinine, and that it will be admissible, whenever quinine will be tolerated, requiring, however, much larger doses to produce the same effects. It has been prescribed in from five to twenty grs. doses, the patient generally taking from a quarter to half a drachm between the paroxysms. It has, however, been administered in all stages and given during the height of the fever, has manifested decided febrifuge powers with little nausea. To say that we have not known it to fail would be an extravagant negation of facts, but this we have observed, that the comparatively few cases

which have resisted the cornin treatment, have almost universally proved obstinate under quinine, and the failure of the cornin has apparently been due to some complications of the disease, some internal seat of irritation inciting the paroxysms, and which has required appropriate treatment. Neither has it, in intermittent neuralgia, proved very successful; although an improvement took place, in a mitigation of the pain, it was not sufficient to break it. This, however, was only a single trial. In regard to its sensible effects, we have not observed that it is more apt to nauseate or induce headache than quinine, nor have we observed the ringing sensation in the ears produced by quinine and hydrastine.

This opinion of its merits is founded upon a systematic observation of a very large number of cases, through several consecutive months, under the cure of Dr. Pitcher, at St. Mary's Hospital.

In the course of these observations, in a number of cases, the following unusual order has been developed in the progress of cure; occurring at first after the use of cornin, but subsequently observed also after quinine. In cases without decided rigors, but with irregularly occurring chills, succeeded by moderate febrile action, the rigors have at once become fully developed, with high febrile reaction and with the whole order of a regular ague paroxysm, after the administering of the antiperiodic in a full dose, apparently inducing a severer form, but in reality, quite the contrary—for at this time, has occurred the first distinct intermission, whereas previously the paroxysms had followed each other so closely as to present a continuous form. With the continuance of the antiperiodic, the disease has speedily yielded, showing conclusively that the development of the rigors has been the induction of a milder form. It is manifest how the observance of similar phenomena, differently interpreted, might be construed into a confirmation of the Hahnemanic law of *similia similibus*, &c.

We will conclude with detailing a few cases illustrative of some of the foregoing remarks:

CASE 1.—Wm. H. entered the hospital, May 28th, with an ague of nine months duration; for the past six weeks has had a regular daily paroxysm, well developed in all its stages, is very much debilitated, and presents the malarious cachexia, sallow complexion, loss of appetite, costive bowels, &c. R. Cornin, gr. x., Hyd. C. Creta, gr. ii., twice to-day, and same dose in the morning before the paroxysm.

May 30—Has had no return of paroxysm. Continue Cornin, gr. v., each day.

June 4—Has had no return since, and is improving in his complexion, strength and feelings; appetite returned, and secretions natural. No subsequent return of paroxysm.

CASE 2.—Geo. D. entered hospital, June 4th, with intermittent of fourteen months continuance, and with diarrhoea for six weeks past, which has very much debilitated him. R. Pulv. Opii. gr. 1, Cornin gr. v. twice a day.

June 9—No return of paroxysm since first day of the above prescription, but diarrhoea continues in a milder way. Continue the same prescription.

June 14—Feels quite well, and disposed to leave, but advised to remain a while longer, to prevent relapse. No subsequent return while remaining, nor has since been heard of.

CASE 3.—Davis entered hospital, July 26th, with ague. Had first paroxysm the day before admission. When visited, was in hot stage, with high febrile excitement. Ordered Cornin, gr. x., Hyd. C. Creta, gr. ii., immediately, and repeat in the evening.

July 28th—Had slight return of paroxysm next day, but shorter and milder. Commenced to improve soon after the first dose, which apparently acted as febrifuge as well as antiperiodic. Continue Cornin, gr. x., once a day.

August 4—No return since. Feels well in every respect.

CASE 4.—Cummings entered hospital, July 18th, with ague of six weeks. Rigors not developed, but fever coming on at regular periods, preceded by chilly sensations of short duration; bowels costive. Ordered alt. pills, after operation of which, to take Cornin, gr. v., three times a day.

July 21—Has had to-day for first time a regular shaking ague. R. Quinine gr. viii., before the paroxysm in the morning.

July 22—Shake returned again to-day at same hour, but shorter, and fever milder. Repeat Quinine, gr. viii.

July 23—No return of paroxysm. Patient remained for some days under tonic doses, and left quite well.

CASE 5.—Michael C. entered hospital, July 28th. Case similar to last, an intermittent fever without rigors. Was ordered Quinine in full doses.

July 30—Had a perfectly developed ague paroxysm. R. Cornin, gr. v. twice a day.

August 4—No return since taking Cornin.

August 24—Has continued well up to present time.

ARTICLE V.

Abortion following the Administration of Chloroform.

BY L. G. ROBINSON, M. D.

Some of the zealous advocates for the anæsthetic effects of Chloroform, in the practice of midwifery, claim for that agent, efficiency of specific action upon the contractile fibre of the uterus. And in the diversity of experience and observation, which is found among writers, respecting its utility, it has obtained a "duplicity of character," or specific energy, which, if founded in truth, must have a *rationale* in some law of Physiology. Whatever may be gathered from practical observation, contributing to the exposition of that governing law or principle, will be of interest to the profession, just in proportion to the amount of evidence fairly deduced from facts. Therefore, I offer the following case the detail of which, may have some weight worthy of record :

A few days since, I was summoned to the bed-side of Mrs. N——, an English lady, aged about 35, whose history is briefly as follows: About four years since, she came to this country, and soon after her arrival, became a resident of this city. She had been married six years, was the mother of two children, and had uniformly enjoyed excellent health. In appearance, she possesses a robust, vigorous constitution, of plethoric habit, and florid complexion—true to the English model. Nearly two months after her arrival in this city, she aborted in the 3d month of pregnancy, the cause of which was attributed to a fall, and mechanical injury. She recovered promptly, however, and about two years since, gave birth to a fine boy, at the end of a full period of gestation. Her labor was natural and easy, and her convalescence not protracted. Since that time she has enjoyed uninterrupted good health, up to the event of her present miscarriage.

On the morning of the day in which this occurred, she engaged in the duties of her household affairs, as well as usual, with the single exception of a slight toothache. Her sister, living in the adjoining house, had, for some time past, been in the habit of using Chloroform by inhalation, quite freely, to relieve a facial neuralgia; and happening into the house of Mrs. N——, found her suffering, as she believed, from a similar cause, whereupon, she immediately procured her bottle, and dropping a quantity upon her handkerchief, urged her to "snuff freely until she would begin to feel happy." Leaning back in her

rocking chair, she gratified her sister by full inspirations until the toothache was forgotten, and even sensibility to *severe pinches*, so much obtunded as to afford great merriment for the sympathising and provident sister. She remained in this condition nearly a half hour, and it was even then most difficult to arouse her to a semiconscious state, in which she expressed a desire to lie down on her bed. When asked if she was comfortable, and free from pain, she answered in the affirmative. In this happy dream she rested till about four o'clock P. M., when full consciousness returned, and on attempting to rise from her bed, vomited freely, and then was seized with pains of labor, more severe, tenfold, than she had ever suffered before. This had continued a little more than an hour when I arrived. She at once informed me that she was in labor, (a fact clearly inferred from her expulsive efforts, and intense suffering,) and as she expressed it, "much before time," being in the fifth month of gestation.

Upon examination, I found uterine effort extremely severe, and continuous, while the Fœtus was just passing from a well relaxed os uteri, and was removed without delay, exhibiting no signs of viability. The after-pains continued severely intense in spite of anodynes for about six hours, accompanied with considerable hemorrhage and febrile excitement. But towards morning of the following day, she awoke from a refreshing sleep of two hours length, quite free from pain; and from that time has continued to convalesce without any untoward symptoms worthy of note.

Taking Dr. Snow (quoted by Ransbotham) for authority, we have *five stages* or "*degrees*" in the pathological effects produced by Chloroform, as follows:

Firstly, there exists a kind of inebriation, which is usually agreeable when induced for curiosity. In the second degree the mental functions are impaired, but not entirely suspended; consciousness, however, no longer continues correct, and a sort of dreamy state supervenes. "This degree may be considered analagous to delirium, and to certain states of the patient in hysteria and concussion of the brain; and it corresponds with that condition of an inebriated person, who is *not dead drunk*, but in the state described by the law as *drunk and not incapable*." It is very transitory, and if the inhalation be suspended, the patient, in a very few minutes, recovers the perfect possession of the mind. A considerable degree of Anæsthesia is induced in this stage, and sometimes a high amount of mental excitement, that renders the patient difficult to manage, shows itself. In the third degree, all voluntary motion is paralysed. The fourth degree brings

with it relaxation of the *voluntary* muscles, together with complete insensibility to external impressions, so that no pain is felt, even on the infliction of severe personal injuries. Yet, although reflex movements cannot be excited by touching even the most sensitive parts of the frame, still, some functions of the spinal cord remain, as the sphincters continue contracted, and according to most of its advocates, *the action of the uterus in labor is not materially interfered with.* The fifth degree of Narcotism is *the commencement of dying.*"

From these, Ramsbotham gives us the following synopsis of physiological phenomena exhibited in these effects.

"At *first* the *sensor* and *motor ganglia* are brought under its influence. The function of the cerebrum is next arrested and *Coma* supervenes, 'a total abolition of consciousness, reducing life to a series of automatic movements.' Then the *medulla oblongata* and the *spinal centres* become involved; and lastly, the *ganglionic system*, when the action of the heart is arrested, and life can no longer be supported."

This account of the various symptoms presented, and the order of their arrangement, may be correct as a "*general rule*," but a margin must be left for the exceptions growing out of the great diversity of constitutions, rendered peculiar by age, sex, temperament, diseased condition, &c., and therefore, furnishing a corresponding variety in the degree of susceptibility to the influence of that agent. But let us apply our knowledge of its effects so far as it goes, in the case before us. We find that the description (given by the sister of Mrs. N——) of the effect, corresponds, accurately, with that of Dr. Snow's *second degree*, including, also, the abolition of sensibility described in his *fourth degree*. There can be no doubt that the patient was thoroughly under its influence, for she affirms that she has no recollection of getting from her chair to the bed, a distance of about ten feet. She can only recall the circumstances of inhaling the vapor.

The *rationale* proposed, with regard to the physiological action of Chloroform applied to this case would be, that the first effect was *stimulant*, exciting the *sensor* and *motor ganglia*. Secondly, the function of the cerebrum was arrested, and partial *Coma* supervened. Thirdly, the *medulla oblongata* and the *spinal centres* became involved, producing a *sedative* effect, relaxing the voluntary muscles, and also, the os uteri. The stimulant effect first passed off, leaving the patient relaxed, or under the *sedative* influence. And her return to consciousness brought with it *reaction*, which ended when labor was completed. Now, *caution*, with regard to our conclusions suggests the following enquiry, viz: Would as profound inebriation from

the effects of spirituous liquors in *the same constitution*, have produced like effects? Would their sedative effect relax the voluntary muscles, and the os uteri, in a constitution that had once aborted? If so, then we can with reason suppose that reaction might be sufficient to introduce labor by exciting contractions of the uterus.

Where then, in the history of this case, can Dr. Simpson, or any other advocate for the use of the anæsthetic effects of Chloroform in labor, point to its "*specific energy*" expended upon the contractile fibre of the uterus?

May we not as reasonably explain the phenomena produced without ascribing to it this peculiar property?

If we should jump at conclusions in our research for the *cause*, we should probably find many who would endorse the unqualified assumption that the *direct exciting cause* was Chloroform. But such "circumstantial evidence," though apparently conclusive, ought not to be regarded as sufficient basis for even an assumed verity, respecting the physiological effect of that vapor.

Let us be content, therefore, for the present, with the simple record of the facts, and give them no more weight of evidence than that to which they are justly entitled, ever remembering that we are dealing with *the truths of Medical Science*.

Detroit, Nov. 16.

ARTICLE VI.

Proceedings of the Detroit Medical Society, reported for the Peninsular Medical Journal.

THURSDAY EVENING, Oct. 4, 1855.

Society met at the office of Dr. BRODIE.

Present—The President, Dr. Inglis, Secretary, Dr. Lauderdale, Drs. Robinson, Henderson, Alden, Batwell, Brown and Brodie; Drs. Stebbins and Hollywood, by invitation.

The Society being called to order the minutes of the preceding meeting were read, and approved.

The committee to whom was referred the question, "Is the local treatment of the diseases of the air passages, which are situated below the trachea, by cauterization, or any other mode of applying medicines directly to the parts affected, practicable?" Reported, of which the following is an abstract. The committee divided the question as follows:

1. Is the operation of catheterization of the air passages situated below the trachea practicable ; if so, is it judicious practice ?

2. Is there any other method of local application of remedies which may be used as a better substitute ?

In reference to the first part of the question, the report went thoroughly into the anatomy of the parts implicated ; from which, it was easily seen that together with the high degree of sensitiveness of the organs implicated, that there were several other obstacles which presented themselves to the operation.

1. The situation and construction of the epiglottis.

2. That after the instrument had succeeded in passing the epiglottis, the irritation produced upon the muscles of the parts would cause them to contract, so powerfully, as to impede the function of respiration, thereby rendering the operation not only difficult, but hazardous.

The committee then alluded to the report made to the Academy of Medicine of the city of New York, in which it was shown that the operation could be performed, but that much depended on the kind of instrument used, it being a tube with a large curve, corresponding to a circle, six inches in diameter ; a tube with a smaller curve was attended with a greater number of failures, and the sponge probang failed entirely.

The committee were of the opinion after due examination of the whole subject, that the operation had not sufficient rational principles to recommend it ; and, indeed, were such the case, the violence of the symptoms attending it, and the uncertainty of the result are of themselves entirely sufficient to deter any judicious man from their employment. In reference to the second part of the question, the committee thought that the inhalation of medicated vapors into the lungs was not only practicable, but a safer method than by catheterization.

The committee closed their report by referring to the fact, that when anything new is brought before the profession, be it either medical or surgical, the proportion of cures is always greater than at any future period. If the reason of this be investigated, it is easily shown that the experimenter, in his anxiety to give such theory practical success, confines his patients to strict hygienic rules, brings to his aid other measures, in which, lie the great probability of success, whereas the new method gets the credit, but when the great test

of *Time* is brought as a proof, the once renowned practice is known no more. *

Dr. Alden agreed with the report, but thought he had seen advantage from inhalation.

Dr. Robinson agreed with the report. He thought inhalation useful in chronic diseases of the air passages.

Dr. Christian agreed with the report, but thought catheterization an unsafe remedy.

Dr. Stebbins was of the same opinion. He had no confidence in inhalation.

Dr. Hollywood thought he had passed the probang into the trachea. He thought he could do so once out of every two trials. He thought the application of remedies in this way both safe and beneficial.

Dr. Lauderdale had formerly thought the topical application of remedies to parts within the trachea, both practicable and beneficial, but he had now nearly abandoned that idea. He had not made the attempt of late. He did not know what benefit might be derived from inhalation, and he felt disposed to give it a trial.

Dr. Brodie agreed with the report. He had very little confidence in direct medication to the lungs.

Dr. Christian reported the following question for the next meeting, viz.: "Is the dogma of Sydenham true, that disease is an effort of nature to throw off morbid matter, and thus restore health?"

Committee to report—Drs. Christian, Batwell and Brodie.

Owing to the lateness of the hour, the essay of Dr. Robinson was deferred to the next meeting.

Committee to report question—Drs. Lauderdale and Henderson.

Miscellaneous business being in order, Drs. Kerr and Alden were duly elected members.

Society then adjourned, to meet in two weeks.

THURSDAY EVENING, Oct. 18, 1855.

Society met at the office of Dr. BRODIE.

Present—The President and Secretary; Drs. Brodie, Robinson, Alden, Henderson, Batwell and Christian. By invitation—Drs. Pitcher, Fairbanks and Snow.

* The foregoing report of the committee embodies our views precisely, as far as it refers to the cauterization of the bronchial tubes. That the operation can be performed, we are satisfied, as we have done it—at the same time it was attended with such violent symptoms as to excessively alarm our patient, and to suggest to ourselves that if such violent effects were always produced, and such must necessarily be the case, that the operation was dangerous to our patients, and so eminent as to compel us to forego any beneficial results that might follow. Indeed, we are of the opinion, that as much good is derived from the passage of the probang down the esophagus as the trachea, and we are positively certain without one tithe of the danger.

Dr. Christian, of the committee appointed to report on the question adopted at the last meeting, reported as follows : (We are sorry not to be able to give the report entire.)

The reporters arguments aimed at a refutation of that *humoral theory* of disease based upon the dogma of Sydenham, "that disease is an effort of nature to remove morbid matter from the system, and thus recover the patient."

The fallacy of this deduction, the reporter says, arises from the following erroneous premises :

1. That its author has confounded cause with effect, or has assumed symptoms of diseased action for diseased action itself.

2. That he has assumed a general law from a too limited number of cases, apparently confirming it.

3. He cites from the author himself, in his theory and practice, invalidating this deduction.

This theory arises naturally from a belief in an exclusive humoral pathology, and in the hypothetical doctrines of concoction, fermentation, &c., which terms, whether they be understood in a literal sense, or as implying operations analagous to those expressed by the same amongst non-naturals ; still, only are expressive of operations consequent upon derangement of the fluids ; whereas, it is evident, not to say that the fluids are never primarily deranged, nevertheless, that they may, and often do become so secondarily through derangement of the excreting organs.

That the blood is altered in what are called zimotic diseases, is not questioned ; and granting this, it is more rational to suppose that the morbid phenomena consecutive to this change, arise not from an effort of nature to throw off morbid matter, but from the blood being thereby rendered incapable of performing its office, and furnishing an unhealthy or depraved stimulus to the nervous centres, the nervous force becomes disordered, and hence disorders of the excretions. This is rendered the more plausible from the fact, that in what are termed zimotic diseases, we mostly have indications of nervous derangement prior to any notable excretory derangements, as in the rigors and pains at the outbreak of fevers. The rationale of this, we conceive to be well expressed in the theory of fever, as defined by Prof. Virchow, "that fever consists essentially in elevation of temperature, which must arise from increased tissue change, and have its immediate cause in alteration of the nervous system."

Again, if that theory be correct, by what mode of action is it, that some fevers, as intermittents are at once checked by antiperiodics,

which are not supposed to operate by increasing any of the excretions, or as in some chronic cases of the same in which the morbid train of action is broken by even a strong mental impression.

Again, if we admit the truth of this theory, in what are called zymotic diseases, in which there is an altered condition of the blood, or in all cases of febrile heat, which is said to result from increased tissue change; still there are many cases in which no such change in the blood has been shown, and others where there exists no preternatural heat, and even of these where there is an increase of the excretions.

Finally, he cites from the author himself, extracts bearing against his own theory.

The report was concurred in by all present, except Dr. Henderson, who thought the blood primarily affected in fever.

Dr. Robinson read an essay entitled "The Independent Vitality of the Blood, and the comparative merits of the Humoral Pathology."

Reports of cases being in order, Dr. Snow, at the request of the society, observed, that the prevailing diseases in the circuit of his practice, (Dearborn, twelve miles west of Detroit,) during the last two months, were remittent and intermitent fevers, and dysentery. He had noticed that when dysentery attacked a member of the family, the remainder successively became subjects of the same disease.

Dr. Fairbanks had observed in his practice, (Clarkson, thirty-four miles north of Detroit) the same tendency in dysentery, as related by Dr. Snow. When the thing was practicable he had caused the well to leave home until the sick recovered. This method was successful in staying the spread of the disease.

Dr. Fairbanks desired to know the plan of treatment pursued by the physicians in the city of Detroit in the cure of dysentery. Dr. Pitcher gives once a day, small doses of Hyd. Cum. Creta, but relied in the first days on large doses of Tinct. Opii. and Oleum Olivæ.

Dr. Fairbanks said he had found the long continued use of opium detrimental.

Dr. Pitcher remarked that such would be the case unless the opium was accompanied by occasional doses of alteratives.

Dr. Fairbanks said that when there was but little pain he gave little opium.

Dr. Pitcher enquired if any cases of suppuration of the parotid, accompanying dysentery, had been observed?

Drs. Snow and Fairbanks had both met with such cases.

Dr. Pitcher enquired if these suppurations appeared like a metastasis of the original disease.

Dr. Fairbanks said that some cases appeared as though such were the fact.

The following question was reported and adopted for the next meeting, viz. : "In what cases is it necessary to induce premature labor ; and what is the best method ?"

Committee to report—Drs. Batwell, Stewart and Robinson.

Committee on question—Drs. Alden, Henderson and Lauderdale.

Society then adjourned, to meet in two weeks.

W. B.

ARTICLE VII.

Hospital Report.—St. Mary's Hospital.

The character of the prevailing forms of disease, as manifested at this Hospital, exhibits a greater variety during the past month, than for several months previous.

During the latter part of summer and the early fall, the beds were almost exclusively occupied by cases of intermittent and remittent, some few cases of neglected ones verging towards a typhoid type. Of late, the proportion of typhoid cases has increased. Erysipelas has also become more frequent among the inmates.

Cases of inflammatory rheumatism are more frequently admitted. Of this, there is now a severe case under treatment, which, on admission, presented indications of incipient pericarditis, yielding to Tinct. Verat. Viride.

Case of Lepra.—The following curious case of skin disease has been under treatment :

Wagner, German, aged about 45, entered the Hospital, Sept. 19th, presenting a most singular appearance, and decidedly *fishy* aspect, the entire surface being covered with white, thin scales of small size. These were easily separated ; might be scraped off by the handful ; and were continually falling off of themselves, to such an amount that each morning the sheet was covered with them. As the scales separated, they left exposed, a red, slightly inflamed surface, on which they were speedily renewed. As the scales were falling off in one part whilst being renewed on another, the surface presented an amusingly variegated appearance ; but not the smallest healthy portion was to be seen,

this condition extending not only to the face, but over the scalp; the hair, however, of the head, as well as of the rest of the body, remaining unaffected.

The disease commenced on the legs, just above the ankles, by small, red, slightly elevated points, gradually extending in circumference; and new ones arising until the whole surface was covered. Bowels very loose; stools watery and light colored; urine very copious and limpid; appetite excessive, and no febrile action whatever; was extremely sensitive to atmospheric impressions, even in warm days experiencing a chilly sensation, if exposed, and keeps himself well protected by abundance of covering; had been in this condition four weeks, and says he had a similar attack in Germany.

Directed to have, daily, small doses of Hyd. C. Creta, as an alterative, which appeared to be indicated by the light color of the stools, and an external application of the following liniment:

$$\begin{array}{r} \text{Olei Olivæ } \} \\ \text{Aquæ } \} a a \xi i \\ \text{Acet. Plumbi } \} \mathfrak{g} i \\ \text{M.} \end{array}$$

Nov. 1st—Has become almost entirely cured, small isolated patches still remaining about some of the joints, but daily lessening. His bowels have become regular, and the urine, which before was so copious, showing the vicarious action of the kidneys in assuming the functions of the skin, when that is rendered incapable of acting, has again become natural in appearance and quantity. c.

ARTICLE VIII.

The Pathology and Treatment of Leucorrhœa; by W. TYLER SMITH, M. D., member of the Royal College of Physicians; Physician Accoucheur to St. Mary's Hospital, &c., &c. Philadelphia, BLANCHARD & LEA, 1855.

The established reputation of this author was sufficient guarantee that no production of his labors would be sent to the press, consisting merely of second hand repetition of well known facts, or mere baseless theories, unsupported by strong array of evidence. Nor has he in this monograph, falsified these expectations. On the contrary, the work abounds with novelties, apparently based on truth; no less curious from their novelty than important from their practical bearing.

Its merits can only be known and appreciated by a careful study and no one will peruse the work without a feeling of satisfaction, that the subject has been so ably elucidated, and that so much light has been thrown upon the pathology of this disease, about which so much uncertainty has existed, as evidenced by the fact that opinions on this point have been as various as the authors who have written upon it.

The subject has received no cursory and superficial examination, but has been deeply investigated in all its bearings and relations. Commencing with the description of the minute anatomy of the different parts implicated in this disease, the *Vagina*, *Os* and *Cervix Uteri*, and of the *Glandular Structure* of the *Cervix Uteri*; he proceeds to the examination of the secretions of the utero-vaginal mucous membrane. These are described not only in their sensible, but in their chemical and microscopical characteristics. Upon the specific characteristic differences of these structures and secretions, he bases his classification of the varieties of Leucorrhœa. We will quote from the author, to illustrate: "The demonstration of two very differently organized surfaces, in the vagina, and in the canal of the cervix uteri, with the existence of two very distinct forms of secretion, naturally lead us to the consideration of two very distinct forms of Leucorrhœa. * * * * *

"The lining membrane of the vagina approaches in organization to that of the skin; it is covered by a thick layer of scaly epithelium; it contains, in the greater part of its surface, few, if any mucous follicles or glands; its secretion is acid, consisting entirely of plasma and epithelium, and the chief object of the secretion is the lubrication of the surface upon which it is formed. On the other hand, the lining of the canal of the cervix is a true mucous membrane; it is covered in great part, by a cylinder epithelium; it abounds with immense numbers of mucous follicles, having a special arrangement; it pours forth a true mucous secretion, alkaloid in character, and consisting of mucous corpuscles and, plasma with little or no epithelium; and this secretion has special uses to perform in the unimpregnated state, and in pregnancy and parturition.

"Leucorrhœa admits of a similar division. The first and most frequent and important is the mucous variety, consisting chiefly of mucous corpuscles and plasma, and secreted chiefly by the follicular canal of the cervix.

"The second is the epithelial, in which the discharge is vaginal, or is secreted by the vaginal portion of the os and cervix, and consists for the most part of scaly epithelium and its debris. These two va-

rieties may, of course, exist in various degrees of combination ; sometimes the one and sometimes the other preponderates, or is the original affection ; but the chief importance must be given to Cervical or Mucous Leucorrhœa as being the most obstinate and common."

This is a conclusion, which, if unsupported by other evidence, would naturally suggest itself after discovering the important purposes served by the cervical secretion, having special uses to perform in the various changing conditions of this organ, in the unimpregnated state, in pregnancy and in parturition ; that it would be specially liable to derangement, and for the same reasons would prove more obstinate than the other variety. Among these modifications, which it assumes in serving its various purposes ; that which occurs during pregnancy, the presence of the pure white secretion of the cervical canal, blocking up the os uteri, is considered a very reliable and important sign of uterogestation, as it only occurs in pregnancy. The differences between this, and that which occurs in the unimpregnated state, blocking up the canal of the cervix in the intervals of menstruation, are described as minutely as possible, still we should hardly suppose these distinctions, however apparent on paper, would be sufficiently palpable in practice, to afford a ground of diagnosis, in the majority of cases, or even in any cases, except with well practiced observers ; nor is it a means which could be made use of in diagnosis, except in a limited class of cases ; nevertheless, these do not detract from its value as a sign ; for an importance it possesses, even if only to corroborate other general signs.

As he has shown that Cervical or Mucous Leucorrhœa is the most obstinate and common form ; so to this form he traces the various morbid changes involving the os uteri, the external portion of the cervix uteri and the lower portion of the cervical canal, which have heretofore been treated as independent affections under the names of inflammation, ulceration, induration and hypertrophy.

The pathology of these alterations is expressed by the terms which he employs : *Vascular Injection of the Os and Cervix Uteri, Epithelial Abrasion of the Os and Cervix Uteri, Superficial Ulceration of the Os and Cervix Uteri, &c., &c.*

In maintaining the important part played by the cervical secretions, in inducing morbid conditions of the os uteri, he does not mean to say that they are the only causes of these conditions ; but that "in the majority of cases in which Leucorrhœa is present in combination with non-malignant disease of the os and cervix, the morbidly active condition of the cervical glands, is the primary and essential disorder."

Having treated of the sequelæ of Leucorrhœa, he proceeds to the

consideration of the subject in its relations to various disorders, constitutional and local; in its relations to *Secondary Syphilis*, to *Vaginal* or *Epithelial Leucorrhœa* to *Gonorrhœa* and to *Ophthalmia Neonatorum*. In regard to the first of these, he believes that the uterine symptoms in almost all women suffering from constitutional syphilis, are a general manifestation of the constitutional or secondary disease, and that Syphilitic Leucorrhœa is in the female subject almost as common a manifestation of secondary syphilis as sore throat in the male; in its relations, also, to the *Ovula Nabothi* found upon the cervix uteri, and generally supposed to be obstructed follicles; but which he regards as an eruptive disease, for the following reasons, amongst others: that they are often found in situations where no mucous follicles can be detected; they seldom appear, except in diseased states of the os and cervix uteri; they are frequently attended with profuse discharges from the cervix, with an engorged and patulous condition of the orifice.

Again, in its relations to disorders of the function of menstruation, and its relations to sterility and abortion. This we consider the most interesting and practically important part. He shows, paradoxical as it may appear, how that Leucorrhœa may, in one case, cause amenorrhœa, and in another menorrhagia—in the one case the long continued discharge, debilitating the ovaries so that to a gradual lessening of the discharge, complete amenorrhœa succeeds—in the other, the discharge, though accompanied with debility, irritating the ovaria and fundus uteri to such an extent that there is an almost constant discharge; and as sterility may, on the one hand, be the result of this debilitating effect upon the ovaria, rendering them entirely incapable of discharging their special functions, so on the other hand, it may be caused by its effects upon the impregnating fluid—the spermatozoa, may be prevented mechanically from entering the uterus by the profuse discharge, or the liquor seminis may, perhaps be rendered too dilute to effect impregnation, or finally, the spermatozoa may be destroyed, either by too strong acidity of the vaginal secretion, or by too strong alkalinity of the cervical, one or other of which conditions are of frequent occurrence in this disorder, so that this result may be produced in a duplicate manner. Finally, he considers the constitutional and local causes of Leucorrhœa, and the treatment of Leucorrhœa. The interest will not be found to decrease throughout these chapters, but it would be impossible, even to refer to all the interesting points, much less to give such a synopsis as would afford any but the most vague conception of the subject matter or the manner of its treatment.

SELECTIONS:

EXPERIMENTAL RESEARCHES INTO ANIMAL HEAT IN THE
LIVING AND THE DEAD BODY.

BY BENNET DOWLER, M. D.

(Continued from page 74.)

PART 2.—*Methods and Means of Experimentation.*—The most convenient points for demonstrating the temperature of the living body, are the following:—the palm, the bend of the arm, the axilla, the groin, the perineum, the popliteal region, and the tongue. The legs may be crossed, both above and below the knees, so as to include the thermometer. The sole of one foot may be applied to the instep or ankle of the other; both of the palms may be brought face to face and secured by pressure or a bandage; the fingers may be so arranged as to grasp the instrument; the same effect may be gained by binding, or flexing the fore-arm upon the arm—the leg upon the thigh—the arm upon the side of the recumbent body, while the weight of the latter, in the most perfect manner, compresses the axilla, or any other part of the limb. The tongue which has been generally selected, as the test of the human temperature, is ill-adapted for that purpose; as the breathing, the moisture, evaporation, the exposure of the cavity to the air, the difficulty of covering the bulb of the instrument completely, are circumstances unfavorable to this method—a method repulsive to the patient, requiring the operator to compress the tongue with his fingers, and, moreover, being often dangerous to both parties, as in cases of delirium, during which, the operator might be bitten, and the patient destroyed by the crushing and swallowing of the glass.

In every application of the thermometer, the external air must be, of course, excluded.

The duration of the experiment is a matter of great importance and of no little difficulty. The mercury may reach the maximum or stationary point in one or two minutes—more generally in five, and sometimes in fifteen or later. Occasionally, there seems to be a peculiar and unexplained condition, giving rise to the acceleration or retardation of the calorific dynamics. The conduction may be rapid—the mercury stationary for a time, and, subsequently it may rise considerably. If the instrument be colder than the body, as is generally the case, it must produce a local refrigeration of the part with which it is in contact. If the thermometer be at 50° , and the body at 100° , the former will rob the latter (at the point of contact) of much heat. This inequilibrium must be removed before the real temperature can be truly ascertained. This desirable result is obtained, as I judge, by two routes, namely, by the mere physical conduction and by the physiological generation and circulation, of animal heat. That animal heat in the recently dead body is generated and circula-

ted in currents differing from physical heat in manner, time, velocity, and direction, will be proved hereafter by numerous experiments.

The thermometer at a very low temperature cannot be applied without a loss of time; nor without the risk of arriving at an unsatisfactory and inaccurate result. Hence, the instrument should be heated by the operator's hand, or by some other means so as to approximate the natural temperature. If the patient be colder than is the healthy state, as in cholera, the mercury will quickly fall; or if he be hotter, as in fever, it will rise to the stationary point.

I prefer thermometers from six to eight inches long, for general use, though for exploring the great cavities they should be somewhat longer. The stem and the paper scale are enclosed in a hollow cylinder of glass which arises from the bulb. The latter is not exactly round, but oblong, having a pointed termination so as to pierce the brain, liver, &c. The scale, which is divided into degrees and half degrees, begins with 70° and ends at 120° , thus covering all the ground necessary to human physiology and pathology. This gives a range to the mercurial column of only 50° , which being distributed to a space of from four to five inches, allows of subdivisions as low as the fourth of a degree, with a distinctness equal to that of most thermometers which have but five marks for each decadal interspace, that is, one mark for every two degrees, instead of twenty subdivisions as in my pathological thermometers. As the enclosed stem is delicate, and the bore for the mercurial column very small, while the bulb is comparatively large, and contains, of course, considerable quicksilver, the expansion of the metal gives a very considerable elongation to a degree, insomuch that the fractions become distinct, and well marked.

As these thermometers include neither the freezing nor boiling points, they must be constructed by such as are known to be accurate, by testing both of these points. These instruments are easily carried in the pocket, in a small tin cylinder, are at once accurate, portable, and useful in diagnosis. They were planned by myself, and executed by a young German, for a short time resident in New Orleans. They are far superior to any instruments which I was able to procure at home or abroad. It is melancholy to reflect on the waste of time which other ill-adapted instruments with which I operated at first, required, particularly in reaching the maximum temperature. A further description of these thermometers without engravings, would scarcely be satisfactory.

The temperature of the weather, and of the room, deserve to be noted simultaneously as well as the duration of the experiment. The conductive power of the human body is very variable. The maximum as already hinted, is sometimes not attainable short of five, ten, or fifteen minutes. Oscillations occasionally happen. The mercury may be stationary for many seconds, and then, mount several degrees; or, it may arise steadily, yet very slowly. The essential conditions giving rise to these variations, I am not able to designate either physically or physiologically, statically or dynamically. Certain it is that the calorific force of the human body does not move the mercury

in all cases with an uniform velocity. Thus the temperature of the surrounding media, and of the persons examined, may afford the same point of departure, though the maxima sought may require unequal times, on different occasions. Does the maximum represent the equilibrium resulting from the two or three antagonistic forces, namely, those of gravitation, cohesive attraction, and caloric?

The comparative velocity in heating the quicksilver of different thermometers as those of Reaumur and Fahrenheit, so as to reach the maxima or stationary points, and the ratio of refrigeration so as to reach the minima of bodies, are variable, owing chiefly to the method of construction as favoring or retarding calorific conduction and radiation, illustrative tables of which might be given; but it is sufficient for the observer to know that the experiment should be continued until the stationary point be reached, usually from one to five minutes. The temperature, as well as the form of the instrument, has a great influence upon the ratio of heating the quicksilver to the stationary point, both in the living and dead body. Suppose that the temperature of the quicksilver is 50° , the bulb on being applied to the body at 100° , 113° , or any other degree exceeding that of the quicksilver, a local refrigeration is produced at the point of contact, which cannot be removed until perhaps the heat of the entire body shall be re-established, the equilibrium of which will often require five ten, fifteen, or more minutes, as I know from dearly bought experience. Instead of applying a cold thermometer, and then waiting for the calorific circulation to restore the equilibrium, it is better for the operator to heat the instrument in his own hand before applying it, keeping it heated nearly to the probable maximum of the subject, during his experiments, by which he will save time and secure accuracy; or he may place the instrument in one axilla or other region, of the living or dead subject, by which it will soon be sufficiently heated to insure a quick and satisfactory result by transferring it to the other axilla or region.

With respect to the dead body, the calorific laws are peculiar and very complex compared with those of the living body, so that, for example, it may require many hours to reach the ultimate maximum in one or several regions, as will more fully appear hereafter.

In operating on the dead, the same points of demonstration already indicated in the living body are available, together with many others of great value, as the natural passages, that is, the rectum and vagina and artificial punctures into all regions. The puncture should be no larger than is absolutely necessary to admit the thermometer aided by a suitable force, so that the external air may be excluded; for this latter purpose, the skin may be drawn aside before the puncture is made,—after the puncturing, and introduction of the instrument, the skin from its resiliency returns, and acts as a valve. In this manner, punctures of the heart, chest, and abdominal cavities may be made without introducing the external air. The instrument may be forced into the spleen, liver, brain, pleura, peritoneum, and some other tissues and organs without cutting instruments, if the thermometer terminate in a point as it should do.

The method which I have adopted in reaching the brain by dividing the tissues at the inner canthus of the eye, pushing the globe aside, and then passing an iron punch or bit of wood, the size of the thermometer, through the thin bones of the orbit, allows the thermometer to pass into the brain with great facility without permitting air to enter.

Two thermometers are sufficient—one involves too great a loss of time—three, or more, may lead to confusion and mistakes, where there is no patient persevering assistant. In using one only, the observations will be, of course, all consecutive, the instrument being removed from region to region, thus passing through a circle again and again, until completed. Two thermometers, a scalpel, a pencil, a book, and a watch, together with the writing of the notes, all by the same hand, as occurred in these experimental researches, will be sufficiently complicated for one observer to manage with precision, nothing being trusted to memory for a moment.

Calorific Dynamism.—A few words upon this topic in connection with the methods of procedure above mentioned, may not be improper in this place.

Dynamics, or the science of matter in motion, is chiefly due to the phenomenal manifestation of the calorific force.

Rigid physicists regard force as an endowment, property or condition of matter, and not as an entity, agent, essence or substratum, existing independent of materiality. Perhaps the experimental or materialistic philosophy can consistently go no farther, and should recoil from the contemplation of force as something in itself—as something more than the accident of an agent—the whiteness of silver, the hardness of the diamond—something more than even dynamical phenomena.

At every point of the universe both organic and inorganic, a great, varied, positive, veiled force seems to exist, hurling the great planets, as well as the minutest atoms, throughout infinite space.

It is equally difficult to prove, or even to conceive that caloric is an entity or a non-entity. The rigid materialist asks, "Is caloric extended, figured, cohesive, divisible, ponderous, visible, tangible?" Call it an *essence*, and he will ask his apothecary for a sample. Yet, neither the soul nor caloric can be distilled and bottled. But the physicist has not a synthetic or an analytic formula, exhaustive of all the other potentialities of ontology in nature.

It is remarkable that the fundamental notion of force is derived from the subjective or spiritualistic element of humanity, being an intuition, self-evident to every mature mind, though not definable by words. Whether force be the agent and matter the patient, or whether force be inherent in matter as a mere secondary quality, still the primordial conception is derived from consciousness. Physical dynamism is divested of all volitional aim, lying as it does in the objective world, that is, out of the mind, although it would be wholly inconceivable, except by means of the subjective or self-conscious dynamical type within. Indeed, the personal subjectivity of the individual combines types of all the forces, whether voluntary, involuntary or mixed.

The question whether caloric is to be understood adjectively or substantively will not now be entertained, although it must be regarded as the great motor of the universe. Its effects or phenomenal manifestations, as expansion, conduction, radiation, and its physiological actions, rather than its essential nature, interest the physiologist and physician.

Heat and Cold Subjectively and Objectively Considered.—

Neither by myself nor by others have the terms *subjective* and *objective* been adopted as applicable to animal heat, yet in this connection, and, indeed, in physiology, pathology, and clinical medicine in general, the use of these terms would obviate much circumlocution, ambiguity, and inaccuracy. For example, in symptomology, as in most other sciences, there are two sources of knowledge: 1st, that which is subjective, that is, proper to the patient's consciousness, sensations, self; and second, that which is objective or observed by the observer. The subjective and objective may agree or they may not; indeed they often are fundamentally antithetical. Rheumatism sometimes has no objective symptoms, while the patient suffers severely from subjective symptoms or sensations of a painful character. In cholera, objectively the coldest of all diseases, the patient has generally in a subjective sense "an inward fever—an inward heat," &c., solely characterized by his own personal consciousness or feelings. In some other diseases, the patient is a living antithesis of heat and cold. Subjectively he is very cold, that is, he feels inly great coldness, shivers, covers himself with blankets, and surrounds himself with heated bodies, as in intermittent fever, and yet I have found objectively that not a few of such patients have been very hot as tested by the touch and the thermometer. So in algid fever, as congestive, the patient may feel inly oppressed with burning heat, while the thermometer shows him to be excessively cold.

The popular phrase, "inward fever," may therefore be strictly true in many cases wherein the skin is comparatively cool; that is, the heat may be not only unnaturally great, but unequally distributed in the central inaccessible organs, and therefore more dangerous than that which is fully developed and equalized upon the circumference of the body. That such is the case may be inferred from what is witnessed upon the surface in different regions during febrile diseases.

The Law of Refrigeration.—In this experimental inquiry, particularly in reference to the laws of heat in the recently dead body, differing, as they do, from the laws of physical, chemical, physiological and pathological heat, it is of fundamental importance to keep in view the physical law of cooling first announced by Sir Isaac Newton, and clearly put by Pictet, from whose work on Caloric I translate the following concise statement:

"For a long time it was thought that this law was exact; but when people wished to verify it, they found that it was only true in cases where the temperature of the body did not exceed that of the surrounding air more than from 45° to 50° ," (113° to 122° Fah. covering the whole ground of my observations:) "for still greater differences the law is inexact, and the more so as the difference of

temperature is inconsiderable. When a solid body of what form soever cools itself in a medium of constant temperature, it is evident that the temperature of the body ought to decrease from the surface to the interior, but that the difference of temperature will cease as the refrigeration shall progress, and that the temperature of all the points of the mass must terminate by becoming uniform, and equal to the surrounding medium, in a longer or shorter time; it is then only that refrigeration will be complete. M. Fourier has determined all the circumstances of the refrigeration and heating of solid bodies by setting out with the hypothesis that the relation of one molecule was proportioned to the difference between its temperature and those of the surrounding molecules."

Dr. Whewell gives the following synopsis of the Newtonian law of refrigeration: "The simplest rule which can be proposed is, that the heat thus communicated in a given instant is proportional to the excess of the heat of the hot body over that of the contiguous bodies; there are no obvious phenomena which contradict the supposition that this is the true law, and it was thence assumed by Newton as the true law for radiation, and by other writers for conduction. This assumption was confirmed approximately, and afterwards corrected for the case of radiation; in its application to conduction it has been made the basis of calculation up to the present time."—(Hist. Induc., Sci. ii., 520-1.)

In a vast many human bodies, for hours after death, the calorific laws of increment and decrement, oscillation and uniformity present fundamental antitheses to the received physical and physiological theories of the day, being altogether peculiar, and not conformable to the Newtonian law until the lapse of a period more or less prolonged when true physical refrigeration predominates.

(To be continued.)

SOME ACCOUNT OF THE WOUNDED IN THE RECENT BOMBARDMENT OF SEVASTOPOL.

BY D. J. DUNIGAN, ESQ., SURGEON, ETC.

It may not be irrelevant to the subject, to give a short summary of the military position. The French occupy both flanks; the English are in the centre, their works being divided into the Right and Left Attacks (Chapman's and Gordon's batteries). The Right Attack fought the Mamelon, left flanks of Malakhoff. and Redan, and also some smaller works continuous with them. The Left Attack opposed the right flank of the works around the Malakhoff Tower, right flank of Redan, the Barrack, Garden, 4-Gun, and Flagstaff batteries.

The proximity of our batteries to those of the enemy ranged between 1800 and 660 yards; one since raised in the Quarries, is dis-

tant only about 300 yards; the Rifle Pits, in advance, were, in some places, within 40 yards of each other.

During the bombardments, the Royal Naval Brigade sent 600 men into the trenches; those remained on duty between twenty-four and twenty-six hours; they marched into and out of battery under cover of night, to prevent the enemy firing upon them; the men took out their provisions cooked, and were accompanied by two Medical Officers—one for the Right, the other for the Left Attack.

The first parallel was occupied by the Royal Naval Brigade, Royal Artillery, Engineers, and Medical Officers, with their orderlies.

In the ravines, leading from the Camp to the batteries, ambulances were stationed for the transmission of the wounded to the Field Hospitals. The Medical Officers' duties in the trenches consisted, for the most part, in affording temporary relief to the wounded, namely, arresting hæmorrhage by ligature and tourniquet; splinting broken limbs, bandaging and forwarding the patients by fatigue parties on stretchers, to the different stations of the Ambulance Corps.

Most of the wounds were interesting in a Surgical point of view, but it would be both useless and tiresome to attempt even a list of them; yet some appeared to be so very singular in their nature, that I will mention those only, to the exclusion of all others.

I.—SHELL WOUNDS.

A seaman, knocked down by a fragment of mortar shell, was picked up dead. The head was apparently swept from his shoulders, but there was no traces of hæmorrhage. On disentangling his clothes, which were tightly jammed around the injured part, the head was found driven downwards into the chest, carrying with it a great portion of blue shirt and red comforter. A small tuft of hair alone was visible, at the bottom of a deep cavity. It was a regular intussusception.

An officer of Engineers had just entered the battery, when a 13-inch mortar shell fell close by him, exploding as it struck the ground. One thigh was blown into the air; the other, with its bones, shattered throughout, but retaining its continuity by means of the integuments, was thrown around the back of his neck, and hung pliantly over the opposite shoulder, just as the arm of a child might lie in contact with its mother's neck. He lived for a few minutes.

A shell from the Malakhoff burst through the embrasure of the right Lancaster gun, disabling four men. One received a compound comminuted fracture of the left thigh, and a similar injury of the arm; the second, a compound comminuted fracture of the left thigh; the third, a comminution of the right knee-joint and ankle, both which joints were widely open. About a pound weight of iron shell was immovably impacted in the inner condyle of the femur. The fourth was an artilleryman at the next gun, whose tarsus was injured. There was extensive laceration in the three first cases, and the shock was extreme: there was an oozing or welling of blood in two of them. The Medical Officers attended to those cases where the men fell in rear of the embrasure, at which the enemy still continued to pour their

shot and shell, but, fortunately for the Medical Officers, with less precision than before.

A shell was fired at a group, principally composed of Sappers and Miners. One was killed, his face having been shot away. Another was carried up to the first parallel badly wounded. On examination, it was found that half of the inferior maxilla of the dead man was driven into the roof of the second man's mouth.

A night or two after the capture of the Quarries, a man was killed in them by a shell from the Redan. An officer of the 97th, who was standing close by, received several severe superficial wounds from splinters. A foreign body was imbedded in the middle third of the left thigh, which was easily withdrawn by the finger. It was a large portion of one of the cylindrical bones of the man who had been killed; it was as sharp as a chisel.

Two artillerymen stationed in the 8-gun battery in the advance, on the Right Attack, were sitting or lying down, engaged in conversation, when a shell exploded as it approached their position. The head of one was taken off, as if by an axe, above the neckcloth, the tie of which was undisturbed. The forearm of the other man must have lain in juxtaposition with his thigh, for both limbs were lopped off by the same blow, in a line corresponding with Poupert's ligament. This man lived for about half an hour, urgently requesting all around him to keep sprinkling his face with water. The wounds in both limbs were jagged. The muscles of the thigh were drawn out in long bands: there was no hæmorrhage.

Another artilleryman, somewhere about the same part of the works, had his left knee-joint laid open and comminuted by a fragment of shell: no shock; a slight hæmorrhagic oozing. As he approached the Medical Officers on a stretcher, he facetiously asked, if it was not "a wooden leg for him?" and as he was being carried to camp he asked us "to make the leg for him."

A 13-inch mortar shell dropped so close to a seaman that it burned his perinæum, testicles, and clothes as it burst. One of the ankle-joints was laid open; but the wonder is, how he escaped being blown to fragments.

About the central point of Gordon's battery, a shell burst among a gun's crew. One poor fellow was struck over the angle of the ribs. He uttered a cry for the Doctor, and rushed about twenty yards, when he staggered, fell, and instantly expired. His heart and great vessels were ruptured. A second man's face, right shoulder, and arm, with the trapezius and latissimus dorsi, were torn away from the body. A third received a compound fracture of ankle-joint, and a similar one of the ulna. The fourth escaped with a severe laceration of the calf of the leg.

An artilleryman, sitting near one of the magazines, had part of his thorax and shoulder cut away, in a line from the sterno-clavicular articulation to the hypochondrium, by the half of a 13-inch shell falling upon him.

As the Military Relief entered the Right Attack early one evening, the enemy opened a fire of a shell upon them from the Garden

batteries. One burst over the head of the column, by which two men were killed, and about a dozen seriously wounded, the legs and arms of some being carried away. One man, whose forearm was destroyed, had all the comminuted bones driven into the thigh.

II.—WOUNDS FROM ROUND SHOT.

These wounds are easily recognized at the first glance, as there is but little variety in the appearance they present. Most of the men killed by shot had their heads knocked away, either completely or in part. However, some cases occurred where those large projectiles went through the body, and even through the upper part of the thigh, making orifices of entrance and exit.

A bombardier, at one of the mortar batteries, while in the act of laying the mortar, was struck over the ribs by a spent shot, which had barely sufficient force to ricochet over the parapet, and drop into the covered way. As soon as the man was struck, he uttered a loud scream, and, as he fell, made a convulsive death-grasp, and seized the cap of the officer who was standing beside him. Death was instantaneous, although there was no mark nor breach of surface to show the size of the injury. Nothing could persuade his companions against the idea of his having been killed by a "wind contusion."

During the past winter, a shot ricocheted with great force over one of the parapets, carrying away the cap from a seaman's head. The man was a little stunned, but no further mischief ensued. When his cap was picked up it contained a handful of hair, which had been shaved from the scalp by the shot. This would have been "a poser" for the old wind contusionists!

III.—BULLET WOUNDS.

Our advanced trenches being, in many places, within forty yards of the enemy's rifle-pits, wounds of great severity were inflicted on both sides, as the force of the bullets was undiminished by distance. The orifices of exit, caused by the conical balls, more resemble shell wounds, in some instances, than a bullet aperture. In wounds about the head, especially, I have seen nearly the whole of the parietal bone carried away.

Notwithstanding those jagged wounds from Minie balls, I have seen a soldier of the 41st hit by one on the nose, which caused as clean a wound as if done by a sharp knife. The nose was divided at the junction of the cartilages with the bones. The lower portion dropping down, but adhering by a good pedicle. It was brought together as in hare-lip.

Most of the wounds caused by the new conical bullets are, however, remarkable for the manner in which they plough up the soft parts.

A soldier of the 33d was struck by a ball which made six openings. It passed through the right thigh, through the scrotum, and through the left thigh, where it escaped.

The Russians use several kinds of bullets—one a solid conical ball, which belongs to the Liege rifle; another of a large size and conical form; hollow at the base, with a small pillar, or nipple, standing in the cavity. It is surrounded by three lines. At the base, to guide

the ball in its flight, there are two other smaller ones, modifications of this principle. The old round ball is also still employed. In some cases, two of those round bullets have been found connected by a transverse wire, like bar-shot.

IV.—GRAPE-SHOT WOUNDS.

Grape-shot wounds are very numerous. The following was an interesting case :

A soldier of the 49th was struck on the temple by a grape-shot which destroyed the squamous portion of the temporal bone. The brain was flowing through the wound, the man breathing stertorously. The grape-shot was supposed to be within the skull. It was subsequently found in his mouth, at the base of the tongue, pressing against the epiglottis.

Since the commencement of siege operations before Sevastopol, one Medical Officer has been killed, and two or three have been wounded. The first, Mr. O'Leary, Assistant Surgeon of the 68th Regiment of Light Infantry, was actually cut in two by a cannon-ball while in the act of assisting a wounded seaman. It is only to be wondered at that more casualties have not occurred among the Medical Officers; for during the heat of the fire they are constantly called from place to place, running along the batteries through the line of fire, in quest of the wounded. During the second bombardment this peripatetic system was very trying and fatiguing, for the soil was heavy and tenacious from the torrents of rain that then deluged the trenches; and instances occurred where officers' boots drew off while running along to assist the wounded.

The French arrangements are excellent. They have established a Surgery, with all the necessary appliances, in one of the ravines, where a staff of Medical Officers are stationed for daily duty. The Medical Officers in the trenches apply tourniquets, or do whatever is most urgently called for, on the spot, and then send the wounded on to the Hospital Staff, by whom they are next examined. If the cases demanded immediate amputation, the operations are performed; if not so urgent, the cases are sent on to the Field Hospitals.

The duties of the siege fall heavily on the Medical Officers of the Naval Brigade, five of whom do that duty, and out of the five two go daily on trench duty. It comes to the turn of an Army Medical Officer to go less seldom into the trenches. The time of duty varies in the different divisions, according to the strength of the Medical Officers in them. In some, the Medical Officer goes once in a fortnight, while in others the time extends even to once in five or six weeks. The Royal Artillery send no Medical Officer now, unless a general bombardment be going on. On the whole, this trench duty is very trying and hazardous; and, in performing it, the Medical men run the same dangers, if not more, certainly not less, than the executive Officers, who are generally stationary in a battery, while the Medical Officer, as ubiquitous as possible, is rushing in all directions to succor the wounded.—*Med. Times & Gazette.*

CORONERS' INQUESTS.

We would call attention to the subjoined letter of Dr. Semmes, Chairman of the Committee on Coroners' Inquests, and urge those who may possess information on the subject to comply with his request.

To the Editor of the Charleston Medical Journal:

DEAR SIR—At the meeting of the American Medical Association, held in May last, in the city of Philadelphia, the undersigned was appointed chairman of a committee to report what "measures should be adopted to remedy the evils existing in the present method of holding coroners' inquests."

Any suggestions, or facts, relative to this important subject, will be most thankfully received and acknowledged. It is highly desirable to obtain any facts, such as the laws regulating inquests, the fee paid to medical witnesses in performing post mortem examinations by order of the authorities, and whether medical men usually, or in accordance with law, fill the office of coroner. Any documents, reports, or other matter relating to this subject, will be thankfully acknowledged.

Very respectfully,

Your obedient servant,

A. J. SEMMES, M. D.,

Chairman of Committee on Coroners' Inquests.

WASHINGTON, Sept. 11, 1855.

—*Charleston Medical Journal and Review.*

A WISE CORONER.—Intolerant New England fines the surgeon who cannot cure a fractured femur without shortening; she only tolerates quacks. A queer illustration of the immunity enjoyed by these gentry has recently been communicated to us. A Thompsonian was called on to treat a pilot suffering from a large strangulated hernia. "A pilot," said the empiric, "his disease must be wind!" So he ordered a large dose of jalap, with cayenne pepper in juniper tea. He bade the sufferer persevere in this treatment, promising that it would make him quite another man. The patient died. The coroner and his jury investigated the case, and, after hearing the treatment detailed, declared that the deceased had died a natural death. Surely the coroner had exquisite medical perception! No one will deny that death, under the circumstances, was quite natural.—*Ohio Med. and Surg. Jour.*

EDITORIAL AND BOOK NOTICES.

The North-Western Medical and Surgical Journal for November, contains another extended article on the Medical Department of the University of Michigan, and the Peninsular Journal. This article is a decided improvement in tone and manner upon its predecessors. We could hardly expect an ardent controversialist, especially when his deepest feelings and strongest interests were connected with the subject in dispute, would suddenly pass from the extreme of rude discourtesy and reckless misstatements, to a high degree of truth and fairness; and such in the present instance has by no means been the case. The article in many respects is decidedly unfair and objectionable; but it is in so much better temper, particularly than the one in the September number, that we take pleasure in making the acknowledgment.

We shall not inflict upon our readers any extended reply. The material facts in the case have been sufficiently set forth in our previous articles, and must be understood by those who have read them. We claimed in the first instance, that in certain specific matters of reform, the Medical Department of the University of Michigan was in advance of the great body of medical schools in this country; and this claim we have sustained by a reference to facts, and by comparisons, to which we do not now deem it necessary to make additions.

So far as the Medical Department of the University itself is concerned, though it has been assailed by its enemies, and attempted to be betrayed by those who should have been its friends, it scarcely needs even the feeble support we have attempted to render it. It stands upon a proud eminence, a monument of the liberality of a State, and though doubtless susceptible of improvement, it exerts its influences for the elevation of the profession, and we are still permitted to hope may long serve as an example for other States, and other schools to follow.

So far as ourselves are concerned in this controversy, we have but little more to offer. As this article in the North-Western contains no accusations of "falsehoods," and such other grossly unbecoming charges, it will not be necessary as it was before, to cast from us the aspersions. Our excitable neighbor has learned wisdom from experience, and appears to have come to the conclusion that a degree of discretion is the better part of valor. In this, his apparently concluding effort, however, by the way of covering his retreat, he has

fired off a few squibs, which, though serving his purpose, to raise a smoke, under the obscurity of which he has retired from the field; yet they are so entirely harmless as to require nothing more than a passing recognition.

The similitude of the "fish which possesses the faculty, when pursued by an enemy, of ejecting a considerable quantity of black fluid for the purpose of coloring the water, and thereby hiding itself from its pursuer," would have been precisely in point, if it had been applied to the editor himself, but it has lost its force by being wrongly directed.

It will be recollected that in a former article we were accused of falsehood in two prominent particulars. One was in relation to "daily examinations" in Rush Medical College, and the other as to the requirements exacted by that institution of graduates on the score of "preliminary education."

A few words upon these points, as they have a bearing upon our reputation, will constitute mainly what we have now to say.


With regard to the first, in our last article, we reiterated our former statement in more full and explicit terms, and promised that if it was specifically denied, we should resort to certificates of proof from those who knew, meaning their own students. *Our statement has not been denied.* On the contrary, though the editor still says the Professors in Rush Medical College "make it a rule" to examine daily, he admits they "sometimes" do not practice it, but intimates that they make examinations when a subject is completed. That this is done "sometimes" we believe is true—but that either this or daily examinations have always been practiced in Rush Medical College, or that they have generally been practiced by *all* the Professors we doubt not. Dr. Davis knows it is not so. But even if this or other institutions did make such examinations as Dr. D. would have us believe, it does not affect the main question with regard to the superiority of the University of Michigan on the point of examinations. *Thorough daily examinations in common with lengthened courses of instruction* is what Dr. Cabell advocated, and in this respect we claimed superiority for the University of Michigan over nearly all the schools. We know of but *one* institution in this country equal to it in this respect, and that is the University of Virginia. This school has a longer term, and we may presume is in this respect, at least, quite as thorough. In some other respects it, however, falls short of the Michigan schools. It has fewer Professors, and does not, we think, require the same standard of preliminary education, and graduates students after one course of lectures.


In regard to our statement of the requirement for graduation in Rush Medical College, respecting which we were so severely accused, our neighbor is evidently ashamed of the language he used, (as we predicted he would be when he came to his sober senses) and endeavors to explain its harshness away. He says we have done both him and ourselves injustice in regarding him as having accused us of wilfull misrepresentation, and states that he used the word "*falsehoods*" as "strictly synonymous with *errors*."

We cheerfully accept the explanation, but must confess that we learned the meaning of words out of a different vocabulary from that which Dr. Davis has studied. Our "preliminary education" was different. This affair strongly reminds us of what we have sometimes observed among rude boys. A blustering unmannerly fellow on some misunderstanding with his companion, coarsely exclaims—"you lie."

The other not willing to pocket such an insult commences the execution of summary justice, when the former adds to what he would have to be considered his unfinished sentence—"under a mistake." But this is a bad example of boys play. Seriously, we are very glad to accept of this explanation, and evidently hope that if we should ever again be drawn into controversy with our hasty neighbor, he will exercise more caution and self-control, and that our pages will not be defiled with such language as in this has been uttered. We submit to those who have followed this controversy through, as to who was the aggressor, and who throughout has been responsible for the unpleasantness that has occurred.

To us it has been a matter of deep regret that peaceful relations both public and private, so long and so intimate, should have had even their surface disturbed (and we trust after all it is only the surface) by a controversy in some respects so unseemly.

 We present our readers in this number, a paper by Prof. Goadby on "Tuberculosis, its causes, and indications for its treatment, and inhalation." This has been prepared for us, in answer to our request—having listened to the brief remarks on the subject expressed at a meeting of the Detroit Medical Society, which were included in the report of its proceedings, published in the last number of this Journal.

 Those of our readers desirous of securing the services of efficient agents for making collections, purchasing mining stocks, payment of taxes, loaning of money, &c., are referred to the advertisement of Huntington, Lee & Co.

OBITUARY RECORD.

It becomes our duty as journalists, to announce to the profession, the death of one of its most gifted and distinguished members.

Dr. T. Romeyn Beck, died at his residence, in Albany, on the 19th of November, 1855, in the sixty-fourth year of his age; being at the period of his decease, the last survivor of five brothers, all of whom were remarkable for the possession of talents above the common rank of men.

Dr. Beck had for many years held a conspicuous and influential position among the citizens of his native State, and been favorably known as a public teacher and author, having for a quarter of a century been the head of an institution of learning, to which his talents had given celebrity, and the author of one of the most popular and useful works on medical jurisprudence, in the English language.

But the great charm of his character consisted in the ardor of his natural benevolence, and the truthfulness and fidelity with which he pursued his aims, and executed the trusts committed to his charge. He leaves behind him the lustre of a bright example, and the abiding fragrance which clusters around good works and a good name.

CLINICAL LECTURE ON SURGERY: By M. Nelaton, from notes taken by Walter F. Atlee, M. D. Philadelphia: J. B. Lippincott & Co., 1855.

We have received the above work from the publishers, J. B. Lippincott & Co., and can safely recommend it to the profession, as a valuable addition to our American literature.

Clinical lectures are extremely valuable, as they possess details of cases seldom met with in our standard works on surgery and its principles. It would have been a pleasure to us to have given it an extended review, but as we see in it nothing to condemn, and only to praise, and as our time is so much occupied at present, we must deny ourselves that privilege. As a work on Clinical Surgery, we know of only one its superior, and were it not from the fact that much of our surgical information has been derived from the Clinical Lectures of Sir Benj. Brodie, we might accord this the palm.

The contents embrace the views and experience of Mr. Nelaton on almost every surgical case, and is in itself a compendium of information.

Dr. Atlee deserves the thanks of the profession, for the able manner in which he has reported and arranged the work, and we hope as a reward for his labors, it may find a place on the table of every physician in our country.

W. B.

A PRACTICAL TREATISE ON THE DISEASES PECULIAR TO WOMEN. Illustrated by cases derived from hospital and private practice. By Samuel Ashwell, M. D. Third American, from the third and revised London edition. Philadelphia, Blanchard & Lea, 1855.

This admirable work has been lying for a long time upon our table ; a succession of pressing engagements having prevented us from giving it that early notice which its sterling worth demanded. It makes its appearance in an octavo volume of 528 pages, neatly bound in muslin, and printed with care on excellent paper. Commencing with some general remarks on the "Pathology of *Functional* diseases," the learned author proceeds to treat in detail of all the various diseases of function to which the delicate reproductive organism of the female is subject ; handling his subject with a clearness, vigor and understanding, which excites the admiration, while it proves to the gratification of the reader.

Under the head of *Functional Diseases*, the author presents his readers with able and minute descriptions of the diagnosis, prognosis, pathology, etiology and treatment of Chlorosis, and its numerous complications ; Amenorrhœa and its causes ; Vicarious Menstruation ; Dysmenorrhœa Menorrhagia, Leucorrhœa ; the diseases attending on the decline of Menstruation ; Hysteria ; and Irritable Uterus ; each separate subject being illustrated by instructive cases, and accompanied by numerous formulæ, which latter are of peculiar value and interest to the young practitioner of medicine, as a guide for the proper administration and combination of remedies. Proceeding next to treat of the *Organic* diseases of the internal female genitals, the author commences with valuable general remarks on the history and symptoms, Diagnosis, &c., of the *Organic* diseases of the female genitals, in which he dwells with particular force on means of diagnosis, and the value and necessity, and mode of use, of exploratory instruments. Then taking up the diseases themselves, we are presented with a complete description of Tumours of the walls of the Uterus, characterised by Induration ; Premature labor, in Pregnancy complicated with *Organic* diseases ; *Organic* diseases of the Cervix and Os Uteri ; *Organic* diseases of the mucous membrane of the cavity of the Uterus ; displacement of the Uterus ; diseases of the Ovaries ; diseases of the external organs of generation ; and the morbid consequences of undue lactation.

Besides the instructive cases and numerous formulæ which illustrate this portion of the work, there are, in addition, several carefully prepared and elaborate statistical tables, showing the comparative

prevalence of particular affections at the different ages of life, and the success of peculiar modes of treatment.

In collecting the materials for this admirable work, the author has endeavored, as far as was possible, to avoid collecting from the numerous works extant upon this branch of medicine, but depending principally upon his own extensive experience in the management of female diseases, to present to his readers, the practical experience and views of an earnest seeker after knowledge, whose sole aim has been the advancement of his profession and the good of his fellow man. This does not in our opinion detract aught from the value of the work, and we cheerfully recommend it to the favor of the profession, as a full, practical and scientific treatise on all the diseases peculiar to women; confident that from its perspicuous style, general arrangements, and completeness, it will prove a valuable addition to every well ordered library.

Com.

YELLOW FEVER, CONSIDERED IN ITS HISTORICAL, PATHOLOGICAL, ETIOLOGICAL AND THERAPEUTICAL RELATIONS, including a sketch of the disease as it has occurred in Philadelphia, from 1699 to 1854. With an examination of the connections between it and the Fevers, known under the same name, in other parts of the temperate, as well as in tropical regions. By R. La Roche, M. D., member of the American Philosophical Society; of the American Medical Association, Fellow of the College of Physicians, of Philadelphia; corresponding member of the Imperial Academy of Medicine, and Foreign Associate of the Medical Society of Emulation, of Paris; of the Academies of Sciences, of Turin, Copenhagen, Stockholm, Nancy, and New Orleans; of the Medical Societies of Naples, Marceilles, Lyons, etc. In two volumes. Published by Blanchard & Lea, Philadelphia, 1855.

Excepting the Dictionary of Noah Webster, and the History of the United States, by M. Bancroft, we cannot, at the present moment, call to mind any other American production, single in its purpose like this, on which so much preparatory labor has been expended, or into the fabric of which, such an amount of acquired material has been interwoven with such accurate and discriminating originality of reflection. It is a good deal to say that such a work is worthy of Philadelphia, but not too much to say of this, that it does honor to the American Medical Profession, and to the National Association, which had some agency in calling it forth.

We have read it in haste, but still, with sufficient care to enable us to catch the author's views on the origin, history, pathology and mode of propagation of Yellow Fever, and to warrant us in saying, that there are but few readers of such works, who could not study it to advantage. After reading his chapters on the proofs of contagion and non-contagion, we confess ourselves at a loss to comprehend how and where a contagionist is to find a plank to stand on. Had the learned author have gone one step further, and studied the diseases antecedent to the Yellow Fever epidemics, as well as those which follow them on their decline, he would, by showing how the laws of development preceded these great manifestations of morbid phenomena and the process of decay marked their decline, have settled this question of contagion, forever. Who, but this indefatigable indigator, will undertake such a labor?

This work is so voluminous, that in the space allotted to us, we cannot even enumerate the general heads or primary divisions under which the subject seems naturally to be arranged by its author. It should be in the hands of every practitioner, even in this relatively northern part of our country, for if we study the stars aright, there is meaning in the gastro-duodenal distress, and unwonted cephalalgia, which have marked most of the cases of fever to which many of our neighboring citizens have fallen victims, within the past three months. Such teaching and such warning, should not be allowed to pass unheeded and unimproved.

Z. P.

A PRACTICAL TREATISE ON THE DISEASES, INJURIES AND MALFORMATIONS OF THE URINARY BLADDER, THE PROSTATE GLAND, AND THE URETHRA. By L. D. Gross, M. D., Professor of Surgery in the University of Louisville; one of the Surgeons of the Louisville Marine Hospital; member of the American Philosophical Society; author of "Elements of Pathological Anatomy," "a Treatise on Foreign bodies in the Air Passages," etc., etc., etc. Second edition, revised and much enlarged, with 184 illustration. Published by Blanchard & Lea, Philadelphia, 1855, pp. 925.

We are indebted to the courtesy of the publishers for a copy of this valuable work, which, prior to the recent improvement, had already become a trusted authority, on the subjects of which the author has written. Written to meet an admitted professional demand, and designed to occupy a hitherto unappropriated position in medical literature, it must be a matter of great gratification to the author, to feel assured, that he has met that demand and achieved the object of his

ambition. No candid and intelligent reader, can in our judgment, refuse to award to the author the merit of having placed in the hands of the profession, the most complete work on the diseases of the urinary organs, extant.

As this book, except in its revised edition, is not new to the profession, nor its author a stranger, we do not, as we otherwise should, feel called upon specially to point out the excellencies of the first edition or the additions and improvements which give increased value to this. The chapter on stone in the bladder and the appendix in connection with it, is worth the price of the volume. We wish it were in the hands of every practitioner in the country.

It is to be hoped that the author and publishers may each be adequately remunerated for the labor expended and the enterprise engaged in the production of such a work, although this, most probably, is a consideration, which had but little to do in impelling the author to engage in such an undertaking.

Z. P.

THE OBSTETRIC MEMOIRS AND CONTRIBUTIONS OF JAMES Y. SIMPSON, M. D., F. R. S. E., Professor of Midwifery in the University of Edinburg, etc., etc. Edited by W. O. Priestley, M. D., of Edinburg, formerly Vice President of the Medical Society, and Horatio R. Storer, M. D., of Boston, U. S. one of the Physicians to the Boston Lying-in Hospital, members of the Medico-Chirurgical and Obstetric Societies of Edinburg, etc., etc. Volume 1. Published by Lippincott & Co., Philadelphia.

The publishers do not attempt to appreciate the importance of this book, by sending it forth from the press, as so much addition to the medical literature of the day; it being, as announced by the editors, a colligation of the numerous valuable contributions made by its author to the various scientific bodies and journals, which embodies the opinions and practical suggestions of that learned and indefatigable practitioner on many of the most interesting topics connected with the department of science and art, to which he devotes the energies of a capacious intellect, copious from study, vigorous by nature, and strengthened by the habit of excogitation.

We feel constrained to admire both the industry of the author and the zeal, even to enthusiasm, of his editors. American as well as Scotian. For it is difficult for us to conceive how a man so occupied in the business of instruction and the daily and hourly claims upon his time, incident to an extensive obstetric practice, could find leisure to perform so much literary labor, or editorial friends, to enter upon

discharge of their duties, with such evident demonstrations of affection.

The volume before us treats of the various subjects subordinate to the following general arrangement:

Part I. Special Pathology of the unimpregnated female.

Part II. Physiology and Pathology of Pregnancy.

Part III. Natural and morbid Parturition.

This learned author, at times, seems evidently to be reaching after novelties in practice, which will not always stand the tests of trial; for that reason, we cannot, uniformly, without a degree of mental reservation, adopt his views, particularly in his chapter on "Turning as a substitute for Craniotomy and the Long Forceps." We can, nevertheless, cordially commend the work to the careful attention of the student and practitioner, believing it to be a safe counsellor and an intelligent guide to the best method of removing most of the practical difficulties which lie in the road of the medical wayfarer.

Dr. Simpson has been so long and so favorably known on this side of the Atlantic, that we deem it unnecessary to say more in order to insure for any production of his pen, a general perusal. Z. P.

A PRACTICAL TREATISE ON DISEASES OF THE EYE. By William Mackenzie, M. D., Surgeon Oculist in Scotland in ordinary to Her Majesty, &c, &c., to which is prefixed an introduction, explanatory of the anatomy of the human eyeball, in horizontal section, by Thos. Wharton Jones, F. R. S. Professor of Ophthalmic Medicine and Surgery, in University College, London; with 105 illustrations, from the fourth revised and enlarged London edition, with notes and additions by Addinell Hewson, M. D., one of the Surgeons of Wills Hospital for diseases of the Eye, &c. Philadelphia, Blanchard & Lea, 1855.

We gladly welcome a new edition of Mackenzie on the Eye. For years has this admirable treatise on Diseases of the Eye, lain at our elbow, a seldom failing guide in practice. Mackenzies' characteristic is condensation; he may almost be called the Tacitus of Ophthalmology. His treatise gives the results of reading, research and experience, without being embarrassed and overlaid with a display of learning in quotations and references. In a book so eminently practical, it is difficult to select for praise; but we would bestow especial commendation (from our own experience) on the articles on the *Ophthalmia Neonatorum*, and on the various forms of Scrofulous Ophthalmia. Those articles are a treasure to the practical Oculist.

Doctor Jones' anatomical introduction is admirably done.

The account of Helmholt's invention of the Ophthalmoscope is clear and lucid. For this, and for his practical notes, Dr. Hewson well deserves the thanks of the profession. The illustrations are well engraved, and intelligible; and as a whole, the work is a very valuable contribution to the literature of Ophthalmology in our country. To such works may be applied *especially* the maxim that "a rational and cautious empiricism contributes largely to the advancement of medicine."

A. R. TERRY.

CARD OF THE COMMITTEE ON PRIZE ESSAY OF THE AMERICAN
MEDICAL ASSOCIATION,

At a meeting of the American Medical Association, held in Philadelphia, May, 1855, the undersigned were appointed a committee to receive voluntary communications on medical subjects, and to award prizes in accordance with the regulations of that body.

Each communication intended to compete for a prize, must be addressed to the Chairman of the Committee, at Ann Arbor, Michigan, before March 20th, 1856, and must be accompanied by a sealed packet, containing the name of the author and marked exteriorly by a sentence or motto corresponding with one upon the essay, which packet will not be opened unless the essay belonging to it is successful in obtaining a prize.

Unsuccessful papers will be returned on application after the adjournment of the meeting of the Association at Detroit, in May next.

A. B. PALMER, M. D., Chairman.

S. Denton, M. D.

A. R. Terry, M. D.

A. Sager, M. D.

S. H. Douglass, M. D.

C. L. Ford, M. D.

E. Andrews, M. D.

A TREASURE, LOST OR FOUND?

Dr. Batwell has placed in our hands a Homœopathic "*Porte Medicin*," found in this city, containing eighteen bottles of Tinctures and Powders, which will be returned to the owner, if one can be found, having the moral hardihood to lay claim to it. Possibly it may be the more readily identified if we state, that besides the concentrated Tinctures of Hyosciamus, Aconite and Colocynith, there is in it a vial of pure Morphia, of Tartar Emetic, of Calomel, of Ipecac, and of Arsenic. As the looser has been too modest to inscribe his name upon any part of the casket, we have given this descriptive notice of the treasure-trove, in the hope of finding for it, the rightful, innocent and blushing owner.

ED.

THE PRINCIPLES AND PRACTICE OF OBSTETRIC MEDICINE AND SURGERY, IN REFERENCE TO THE PROCESS OF PARTURITION, with sixty-four plates, and numerous wood cuts. By Francis H. Ramsbotham, M. D., Fellow of the Royal College of Physicians of London, Obstetric Physician to the London Hospital, &c., &c., &c. A new American edition, revised by the Author, with notes and additions, by William V. Keating, M. D., A. M., lecturer on Obstetrics and diseases of women in the Philadelphia Medical Association, &c., &c.

This is an enlarged and improved edition of a work, which had already become a standard authority on both sides of the Atlantic, and has now, by the author's revision, and the judicious additions of the American editor, acquired new and stronger claims upon the confidence of the medical profession.

There are portions of the book, to which, had we time and space to devote to a critical analysis of them, we should like to direct the attention of our readers. These are the parts in which the author and his annotator speak of the "Use of the Forceps," the "Process of Turning," "Of Phlegmasia Dolens," "Of Puerperal Fever," and "Of Typhus in the Puerperal State."

But as the objections we should urge against the adoption of their views, in some of these subjects have already been anticipated by the late Dr. Dewes, and Professor Meigs, of Philadelphia, we shall content ourselves for the present with this intimation, and without other reservation, bespeak for this work, in itself a compendium of an Obstetric library, a careful perusal by every practical physician.

Z. P.

PRINCIPLES OF HUMAN PHYSIOLOGY, WITH THEIR CHIEF APPLICATIONS TO PSYCHOLOGY, PATHOLOGY, THERAPEUTICS, HYGIENE AND FORENSIC MEDICINE: By William B. Carpenter, M. D., F. R. S., F. G. S., &c., &c. A new American from the last London edition, with two hundred and sixty-one illustrations, edited with additions, by Francis Gurney Smith, M. D., Professor of the Institutes of Medicine in the Medical Department of Pennsylvania College, &c. Philadelphia: Blanchard & Lea, 1855.

Of "Carpenter's Physiology" it is scarcely necessary for us to say a word. The fact that another edition has been imperatively demanded, is sufficient of itself to prove the value of the work, and the high reputation it has attained.

The present edition has been so much remodelled as almost to constitute it a new work.

Several chapters of the last edition, which included a summary of Animal Chemistry, and of the structure and actions of the Anima

tissues, have been omitted, amounting in all to some two hundred and forty pages. On the other hand, additions have been made to the amount of seventy pages; and these, by no means, constitute the whole of the new matter introduced, since many portions have been re-written, with little or no increase of bulk.

Important additions have been made to the chapters on the "Organic Functions," "The Glandulæ of the Absorbent and Vascular Systems;" also, on "The Minute Anatomy and Physiology of the Liver," the "Functions of the Cerebro-Spinal Nervous System," "Vision," "On the the influence of expectant attention on Muscular Movements," "The Generative Function," and on the "Modes of Vital Activity characteristic of the different Ages." More than this our space forbids us to enumerate.

The American editor, Dr. F. G. Smith, has displayed commendable zeal in the supervision of this edition, and has added to the text some very valuable notes. The whole is sent to the medical public in Blanchard & Lea's usual tasty style.

W. B.

A DICTIONARY OF TERMS USED IN MEDICINE AND THE COLLATERAL SCIENCES: By Richard D. Hoblyn, A. M., Oxen. A new American from the last London edition, revised with numerous additions: By Isaac Hays, M. D., editor of the American Journal of the Medical Sciences. Philadelphia: Blanchard & Lea, 1855.

The reputation of the American editor is sufficient endorsement of the merits of the above work. Besides the definition and explanation of the terms most used in medicine and the sciences connected with it, it contains also the names of our native medicinal plants, and the formulæ for the officinal preparations. It also conforms with the latest edition of the Pharmacopœa of the United States.

The volume is of such size as to be extremely convenient, and its typography bears the impress of the publishers.

W. B.

A MANUAL OF PATHOLOGICAL ANATOMY: By Carl Rokitansky, M. D., Curator of the Imperial Pathological Museum, and Professor at the University of Vienna. &c., &c. Four volumes in two. Published by Messrs. Blanchard & Lea, Philadelphia.

We are under many obligations to the publishers for a copy of the Sydenham translation of this stupendous production of the great German Pathologist. Intending at some future time to return to this subject, in the hope of inspiring our readers, with a love for the themes of this unrivalled author, we shall do no more on this occasion, than thank the publishers for the service they have done the profession, by placing within their reach, this inestimable work. Z. P.

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NO. VII.

ORIGINAL COMMUNICATIONS.

ARTICLE I.

Translation—Comparative Analysis of the blood of the vena porta and the blood of the hepatic veins, etc.—A contribution to the history of the production of sugar in the liver. By M. C. G. LEHMANN, Professor of Physiological Chemistry in the University of Leipsig.

The following results were obtained from the analysis of the blood of horses and dogs subjected to different kinds of food, (care was always taken to place ligature previously upon the veins that the blood obtained for analysis might be pure and unmixed.)

Omitting all statement of the analytic processes pursued, which are found described in my treatise on physiological chemistry, and neglecting also certain details of the composition of the blood of the vena porta and the hepatic veins, I shall dwell only on those points that serve to elucidate the formation of sugar in the liver.

1. SUGAR.—The blood of the vena porta never contains the least trace of sugar either in dogs kept fasting, or in those fed upon flesh.

The same animals nourished upon vegetable food, such as baked potatoes, presented evident traces of sugar in the vena porta,

but in quantity, so small, that a precise determination was impossible.

In a horse fed on rye, bran, cut straw and hay, the portal blood contained a small quantity of saccharine matter. I found only '055 gramme* in one hundred parts of blood. In another case, only '0052 gramme in one hundred parts of blood was found.

The blood of the hepatic veins always contained a large proportion of sugar. In three dogs nourished with meat, I found the following proportions in one hundred parts of dry blood, viz.: '814 gr., '799 gr., and '946 gr. per hundred. In three other dogs, after three days of strict fasting, the hepatic venous blood contained '764 gr., '638, and '814 gr. per hundred. Two other dogs fed upon baked potatoes, the same blood yielded respectively, '981 gr., and '854 gr. per hundred parts.

The hepatic venous blood from two horses subsisted upon vegetable food, contained '635 gr., and '893 gr., for one hundred parts respectively.

It will now be obvious from a glance at the comparative results of the analysis of the influent and effluent blood of the liver, that the opinion first announced by Claude Bernard, respecting the glycogenic action of the liver is amply confirmed.

2. **FIBRINE, ALBUMEN.**—The blood of the vena porta of horses and dogs contains fibrine which in character and quantity, does not sensibly differ from that of other veins. Whatever may be the nature of the food employed, the portal blood of the dog contains a greater average quantity of fibrine than that of the horse.

The blood of the hepatic veins collected with care and without mixture, contains no fibrine. The few flakes sometimes obtained by whipping the blood of the horse, consists almost entirely of white corpuscles, which are vastly more abundant in the blood of the hepatic vein than in that of the vena porta. In the dog, the same relation in respect to this element, exists in the two bloods as in the horse; showing its disappearance in its transit through the liver, almost completely.

I have also satisfied myself from very careful comparative analysis of the blood of the hepatic vein, and of the portal system, that a very remarkable quantity of albumen disappears in its passage through the liver, and in a larger proportion even in the dog than in the horse.

On this incontrovertible fact, that fibrin disappears in the liver, my opinion emitted in a former memoir was based, that the sugar

* The gramme is nearly equivalent to 15 grains.

of the hepatic veins was formed at the expense of the fibrin of the portal blood.

3. FAT AND BLOOD GLOBULES.—The blood of the vena porta always contains much more fat than that of the hepatic veins. The serum of the portal blood of dogs subsisted upon flesh, is generally richer in fat than that of horses, yet the serum of the hepatic veins contains no more fat in the former than in the latter.

The globules of the portal blood of horses is richer in water, and especially in iron, while on the other hand they are poorer in globuline, in extractive and in salts, than those of the hepatic veins. The blood of the latter in both horses and dogs, is much richer in red globules, and in extractive, than that of the vena porta.

In dogs, as well as in horses, I have observed that there is always a considerable loss of the iron of the blood in its passage through the liver. But the difference in the quantity of iron in the affluent and effluent blood of the liver, is even greater in dogs than in horses. It is hence, evident that a part of the hematine of the blood disappears in the liver, and probably contributes to the coloring matter of the bile, a proof, moreover, of the complete analogy of bilifulvine and hematoidine, as already shown by one of my pupils.

Comparative analysis of the blood of different veins, with the arterial blood (all comparisons were made with blood furnished by the same horse).

The efferent blood of the liver is always incomparably richer in sugar than that from any other source. It then becomes mingled with the blood of the inferior cava in its passage to the heart. I can here only confirm what M. Cl. Bernard has long since stated, to wit: that next to the hepatic vein, the inferior cava contains the largest quantity of sugar. In the solid residue of the caval blood, I found in three experiments, '346 gr., '211 gr., and '492 gr. of sugar per one hundred parts.

When in traversing the lung, the blood has become arterialized, no sugar is usually found in it. I have not discovered any in the blood of the horse, although at the time subsisting upon oats and starch. It could be found in the arterial blood of dogs and rabbits, only when the venous blood contained more than '3 gr. per one hundred of sugar. This occurred whenever the conditions necessary to the production of glucosuria existed as when the medulla oblongata had been pricked, or large quantities of saccharine matter injected into the veins or stomach, or when large quantities of saccharine or amylaceous vegetables had been ingested. And here again the same relative prepon-

derance of sugar in the hepatic and caval veins existed as in former experiments.

The blood of small veins, such as the cephalic, the digital, the temporal and the external abdominal of horses, always contains fewer globules, more serum, and of course more water than the arterial blood; but in the larger veins, and especially the vena cava, the blood was not less concentrated than in the arterial, and perhaps in some cases, even more dense. All my experiments seem to evince a remarkable loss of globules in the general capillary system. The observation that the density of the blood of the inferior cava closely approximates to, or even surpasses that of the arteries, does not depend exclusively on the loss of the aqueous part by the renal secretion, but chiefly upon the affluence of the blood of the hepatic veins, of which the most striking proof was obtained by the analysis of the blood of a horse that had taken no water for twenty-four hours before he was sacrificed.

Comparison of all the analysis seemed to prove that in the liver two separate and distinct functions were proceeding simultaneously, to wit: the formation of sugar and blood globules, and the secretion of bile, as M. Bernard has long since stated and clearly established.

The blood of the smaller veins contains more fibrin than that of the arteries; more also than that of the cava or the jugulars. The blood of the vena cava I found to contain one-half less than the blood of the arteries.

Arterial blood always contains more mineral salts than that of the veins.

This condensed summary of the results of the researches of the distinguished Berlin physiological chemist, was originally communicated to the Academy of Sciences, at Paris, in March last, and also published in the very elaborate *Leçons de Physiologie Experimentale* of M. Cl. Bernard, just issued, furnishing as they do, a full confirmation of the important results obtained by the great French physiologist, and establishing too, some original discoveries of his own, published some few years since, they will undoubtedly be read with interest by all who recognize the fundamental relation of biology to a scientific therapeutics.

Some doubt having been thrown temporarily upon the reliability of the facts and influences of Bernard, by the detection through the minute and careful investigations of Schmidt, of very minute quantities of sugar in the general systemic blood of cholera subjects, as well as of fattened animals; and the untenable hypothesis deduced that

as urea, is the product of the general retrograde metamorphosis of the azotized constituents of the system, and not the result of glandular action, so the sugar of the blood had its origin in the metamorphosis of the oleaginous materials, universally diffused through the system.

Bernard, however, has satisfactorily indicated the source of error in this hypothesis, and at the same time has shown that while the facts cited are of value in a purely chemical point of view; from failing to recognize the important relation of secretory organs to the blood, its physiological value is almost completely destroyed. The recent researches of Vernois and Lehmann on the blood of mammalia, and of Moleschott on the blood of frogs, after extirpation of the liver, have on the other hand fully confirmed the views originally advanced by Bernard.

In a purely practical point of view, it might be difficult to decide whether the function of the liver as a glycogenic organ, or its relation to the formation of red blood corpuscles and the distruction of fibrin is the more important. The facts above stated have a very manifest bearing on the hypothetical dieting on substances of the protein aceous group in glucosuria, as it is chiefly on the conversion of alimentary substances, through functional excess of the liver, aided by deficient respiratory action that the morbid increase of sugar in that disease depends.

Without enumerating other constitutional conditions connected with excess or deficiency of the functional activity of the liver, we may briefly allude to the indications furnished by these data in the therapeutics of that form of anæmia dependant upon the prolonged influence of miasmatal toxæmia, to wit: the restoration as a primary measure of the normal function of the liver. A. SAGER.

ARTICLE II.

Carcinoma of the Pancreas.

BY D. C. HOLLEY, M. D.

In the following case of carcinoma of the pancreas, I am free to confess that the true nature of the disease was not ascertained until the autopsy revealed it. Although the researches and experiments of

Bernard have thrown great light upon many of the functions of the chylipoetic viscera, yet I believe some physiologists do not fully concur with him in his conclusions respecting the physiological functions of this organ.

And until its true physiological character is determined and clearly demonstrated, and perhaps even then, obscurity and uncertainty will rest upon the symptomatology and diagnosis of some of its diseases. Its close proximity and relation to other important internal viscera as far as my limited experience goes, adds great difficulty in separating symptoms peculiar to the pancreas from such as might be claimed by neighboring organs.

In this case the patient had within a few months removed from a locality particularly free from malarious influence into a miasmatic district, where at this season of the year (July) diseases of every character are liable to be masked or obscured by the livery of periodical fever.

CASE—Mrs. B., aged about thirty-five years, nervous bilious temperament. I was called to see her on the 18th of July, 1854. She stated her health had been poor for years, had suffered much, and doctored a long time for *liver complaint*, and had removed here with the hope of being benefitted by a change of climate. She had felt more particularly indisposed for the last three or four weeks, had suffered much from constipation, which had very much increased of late; had not had any dejection whatever from her bowels for the last five days; at present complains of a distressing sense of fullness and dull pain in the epigastrium and right hypochondrium, frequently attended with severe paroxysmal pain, resembling colic; almost constant retching and vomiting of a glairy-like fluid; pulse 85, soft, urine scanty and high colored; for the last two or three days has had chills frequently alternating with flashes of heat, countenance appears very sallow, eyes languid and sunken.

She had already taken several doses of patent cathartic pills, and taken several enemata. ℞. Sub. Mur. Hyd., Pulv. Rhei, aa. xv. gr. To be followed by Oleum Ricini, assisted by laxative enemata and warm bath; apply a large sinapism to the seat of distress.

July 19th—Has had no dejection; nausea and vomiting subsided, so that she retained her medicine; passed a restless night; pain and distress still continues unmitigated; pulse slow and weak.

℞. Proto Chlor. Hyd., Com. Ext. Colocynth, aa. ℥j. M. Divide into three parts, take one every two hours, followed by full doses of Oleum Ricini and Terebinth. Continue stimulating purgative ene-

meta, place the patient in a warm bath, continue sinapism to epigastrium, and use dry frictions with mustard, to the extremities.

July 20th—As yet, no movement from the bowels; complains of feeling very languid and stupid; has slight pain in the bowels; no meteorism; tongue covered with a light fur; pulse 85, moderately full and soft; the menses made their appearance last evening.

R. Quinia, gr. xii., Camph. gr. vi., Proto Chlo. Hyd., x. M. Divide into six parts, take one every two hours; apply a large blister over the lower and right portion of the epigastrium; continue laxative enemata.

July 21st—Two very small dejections this morning; passed a comfortable night; pulse 85, soft; the catamenia have pursued their ordinary course.

R. Continue medicine.

July 22—Report about the same; no further movements from the bowels; still complains of great languor and debility; pulse 90, moderately full; tongue clear, and very little dry.

R. Vens. xii℥. Continue supporting alterative treatment; make another attempt to obtain a cathartic operation in the evening, by giving Oleum Ricini, ℥iv; Oleum Terabinth, ℥ss, M. A tablespoonful every hour.

July 23—Passed a restless night; bowels very tympanitic; no dejection; pulse 90, soft and weak. As the ordinary enemata seemed of very little service, I took an ordinary stomach tube, and introduced it into the rectum, and passed it without difficulty, eighteen inches, connecting the tube with the pipe of a self-injecting enema apparatus, and threw in about three pints of warm water.

R. Proto Chlor. Hyd. i℥, rubbed up with gum arabic and sugar. Divide into four parts, one to be taken every two hours. Oleum Ricini ℥j. between each powder. Continue enemata as before, assisted by warm bath.

July 24—No improvement, nor any dejection; pulse 90, soft and weak; abdomen very tympanitic; firm pressure upon the lower portion of the epigastrium occasions pain; no tenderness in any other region; made no further efforts to induce catharsis. On the evening of this day, her pulse became extremely rapid, and feeble, numbering 140 to 150, treatment supporting and anodyne.

July 25—Symptoms the same as last evening; no dejection; peritoneal inflammation evidently lighted up; kept the patient under the influence of opium. Evening—Evidently sinking; continued to sink through the night, and expired on the morning of the 26th.

Autopsy ten hours after death; abdomen tense, and very much distended with gas; upon laying open the peritoneal cavity, about two pints of effusion slightly tinged with blood was found. The peritoneum covering the duodenum and upper portion of the small intestines, also the great omentum, presented a dark redish injected appearance; indubitable evidence of quite an extended peritonitis, resulting in effusion. The stomach presented nothing unusual or abnormal in appearance, but upon tracing down the internal surface of the duodenum, about two inches after leaving the pylorus, the mucous membrane and muscular structure beneath, commenced softening, being covered with a great number of minute ecchymosed points, and at the distance of four inches from the pylorus, was so soft as to be readily scraped off with the finger nail. Passing on further to where the ductus com. choledochus and pancreatic duct open by a common dilatation, the duodenum laid almost completely imbedded in the enlarged schirrous head of the pancreas.

The whole of the pancreas was much larger than usual, and the head in particular was more than three times its ordinary dimensions, and hard and schirrous portions of it cutting under the knife almost like cartilage.

In the portion of the duodenum imbedded in this cancerous mass was found about half an ounce of perfectly transparent fluid, viscous and glairy, resembling very much thick mucilage made of elm bark.

This fluid was entirely confined to the vicinity of the gland, and did not find any of it in the intestine, either above or below it. The mucous membrane, or more properly, the whole structure of the duodenum, imbedded in the gland, was corrugated, the lines running longitudinally.

The papillæ of the common bile duct were considerably enlarged, and quite elevated. The opening of the duct was apparently imperious, as I was unable to pass a capillary probe into it. Upon laying it open, however, for half or three-fourths of an inch, it became suddenly very much dilated, and distended with fluid healthy bile.

The liver, to all appearances, was perfectly healthy; the gall bladder was very much distended with bile from mechanical obstruction of its duct.

No other organ examined presented anything worthy of remark.

My first impression upon seeing the above case was, that I had simply a case of remittent fever to contend with, attended with rather more than usual congestion of the chylopoetic viscera. The patient

had suffered from periodical chills more or less for several days before she came under my care. After two or three days of treatment, I concluded something else must be added thereto, and thought it not unlikely, there was an impaction of fecal matter in some portion of the intestinal canal, probably in the cæcum, and something of the kind, I expected to find when I commenced the examination.

There is no doubt that the immediate cause of death was the peritonitis superinduced in the course of the disease, either lighted up from the cancerous mass, or induced by the efforts at catharsis, the former supposition I think altogether the most probable.

The perfectly torpid state of the intestinal canal following the occlusion of the duct. com. choledo. is worthy of remark; certainly the bile must be the natural excitant of peristaltic action.

I have simply reported the case, and will leave it without comment. It is probably bootless to say, that had I been able to diagnosticate the case correctly, my treatment (though equally unavailing) would have been different. I was assisted in the management of the case by my friend Dr. Carr, of Corunna.

Vernon, Nov. 28th, 1855.

ARTICLE III.

Novel Labor Case.

BY E. BATWELL, M. D.

The report of the following case, with a glance at the previous history, may present to the readers of the *Peninsular Journal*, some points of interest, and also subject matter, for considerable conjecture and surmise.

About a month ago I was sent for to see a lady who, on my arrival, informed me of her desire to have me attend her during her approaching confinement, which event she expected to take place in about two months time, and wished to be informed if any preparatory course of medication was necessary, prior to the period of her expected illness. On inquiry I found it was her first child; that she had been about a year married, and had "felt life" in the foetus some two months and a half previous to my interview with her. Giving her some general directions, I took my leave, and promised to renew my visit. Some few days since. I was hastily summoned by her husband to go

and fulfill my engagement, as his wife then required my assistance, having had expulsive pains for two hours previous. I went, to what I prognosticated would be a tedious and protracted labor, as her age and appearance indicated that rigidity of the external organs would be a most probable occurrence, if I might venture on an opinion about such a subject. The age of my patient was from thirty to thirty-five, rather tall and slightly built, healthy and well developed. I found her nurse tender anxiously awaiting my arrival and fearing the non arrival of "the Doctor" previous to the birth of the child; and saying that the pains were rapid and strong, and the os uteri dilating. On my examining "per vaginam" I found the report of the nurse was correct, that the os was then about the size of a quarter dollar, with the "bag of the waters" satisfactorily performing their office of dilatation. The vaginal secretion was abundant, and every thing promised a speedy termination; even my great anticipated source of delay; a rigid and unyielding perineum appeared soft and pliable. After some little delay, the pains being strong and regular, I again made an examination, and found that dilatation had gone on to the size of a silver dollar. After some continuance of her expulsive efforts, the membranes ruptured themselves, and I made suitable preparations for the coming down of the head on the floor of the perineum; got ligature and all the other requisites for the completion of my task, and then placed my hand over the abdomen to observe if the fœtus had fallen down towards the pelvic cavity; but lo! in place of finding a uterine tumor, I found nothing but a flaccid and loose abdomen!! In other words, that single gush of water terminated, not only the hopes and expectations of the would-be parents, but my anticipations of a good obstetrical fee, rendering useless, *at least for the present*, the well stocked and carefully selected wardrobe of the expected stranger.

Now the next thing to be considered is, what was this accumulation that presented all the appearance of a true conception—namely, cessation of menstruation, increasing size of the abdomen, and the process of "quickening" at the time that the fœtus, usually shows symptoms of increased vitality, the mammary sympathy evinced by enlargement, though the areola was not defined, the slight nausea on assuming the perpendicular position—all evidence of a striking character, that conception had taken place. On consulting authors on this subject, I find but two descriptions that in any way present this anomalous appearance, namely: Hydrometra, or Uterine Dropsy, and Hydatids of the Uterus.

In Hydrometra, however, the fluid secreted is of a thick, dark colored character, very offensive and puriform, whilst in this case, the reverse was presented, the fluid had all the appearance and peculiarities of the liquor amnii itself. Again, the disease occurs most frequently in young married females, whilst here, the age of the patient did not present any characteristic mark of youth, nor had she any of the constitutional disturbance, most likely to accrue from this disease, or have her subsequent symptoms evinced any character, justifying the idea of any local uterine disorder, as she has had a favorable and rapid convalescence. Hydatids, therefore, must account for the untoward events presented in this case. Yet, even many of the diagnostic marks of their presence, were in this case, entirely absent; as, for instance, this lady felt distinctly for three months and a half, the movements of a supposed foetus; nor had she any sanguineous discharge from the vagina during the period of the increase of the abdomen; nor could I find any trace of a membrane, in any of my examinations subsequently. There was no hemorrhage, or any thing to impede my finding it if it existed.

I therefore consider the only possible way that this case can be accounted for, is by assuming that one hydatid occupied the uterine cavity; that its investing membrane became so thin, from distension, that it either remains in the uterus yet or has imperceptibly passed off in the flow of waters. This supposition receives the support of several cases cited by Burns, Denman, and Sir C. M. Clarke. As to the sensation of "quickening" experienced by the mother, I would only suggest that her mind had turned with all its hopes and doubts to the moment she ought to feel the first perceptible movement of her child; that "her wishes were father to her thoughts," and goes far to overthrow the theory of nervous influence in the mother, militating against the well-being of the foetus in utero.

I have laid before the medical profession, this case—in my mind replete with interest—in hopes that if any have met with a similar one, they would let the profession know of its several peculiarities, and the way it may otherwise be accounted for, than that advanced in the preceding remarks.

Detroit, December 18, 1855.

ARTICLE IV.

Sub-acute Puerperal Peritonitis, with some remarks upon Fatty Liver.

Joanah C——r, Married, aged 30 years, and mother of 7 children, was admitted into St. Mary's Hospital, Sep. 13, 1851.

Her history, as far as could be ascertained, is as follows: About three months previous to her admission, she was taken with severe vomiting every morning, which continued for two months and seven days, when she miscarried; after which she was confined to her bed, and continuing to decline, was taken to the hospital; her attending physician having treated her for bilious fever.

Upon examination, she was found with a pinched up countenance, pale, exsanguine skin; also dry and cool; no indication of glandular swelling; considerable effusion in the abdomen, with some tenderness on pressure; bowels constipated, and pulse small, weak and quick, 120 per minute. She had been for some time in the habit of drinking spirituous liquors.

She was ordered to have the skin sponged with capsicum water; and Hyd. Cum Creta and Rheubarb of each grs. X. to be administered internally; also a blister over the abdomen.

Sept. 14. Sponging continued. Drink cream of tartar water.

Sept. 15. Continue the same to-day. Bowels moved slightly.

Sept. 16. Hyd. Cum Creta, Sulph. Quinine, of each iij. grs. every three hours; drink Gin Toddy.

Sept. 17. Continue the same treatment; no improvement.

Sept. 18. Gin Toddy continued; V. grs. Nitrate of Potash every three hours, in a gill of water.

Sept. 19 and 20. Continued the same treatment; condition the same.

Sept. 21. Rubbed with Capsicum; Dover Powder X. grs. twice a day.

Sept. 22. Treatment the same.

Sept. 23. A small red spot manifested itself about an inch below the umbilicus, which spread so as to surround the umbilicus about three inches, and very painful. This continued for three days, the umbilicus pouting out like a teat; inflammation erysipelatous. On the fourth day, this teat like process gave way, and about 6 qts. of dark, bloody looking fluid discharged itself, and very foetid. This reduced the size of the abdomen, and gave the patient considerable ease.

The pulse continued about the same all this time ; bowels free, and also the urine; but the appetite poor. Diet nourishing.

Oct. 27. Till now the discharge has averaged one pt. per day ; the color like cold coffee, and excessively foetid. Patient has been gaining slowly; bowels a little more loose, with some dysenteric discharge ; appetite somewhat improved. Treatment tonic and stimulant.

Oct. 28. Much better to-day ; has taken some refreshment ; bowels more natural ; continued Laudanum and Brandy.

Oct. 29. Very little discharge since the 27th, but so offensive as to infect the whole house ; very tender about the umbilical region ; bowels more natural ; much tendency to drowsiness ; the vital powers failing fast ; pulse small and weak, scarcely perceptible at the wrist. Treatment stimulants.

Oct. 31. Died this morning ; Autopsy. Direction of the umbilical opening downwards, and to the left side. A free incision was then made, extending from the ensiform cartilage to the pubis. Upon reaching the Peritoneum, it was found of a blackish color and very dense. I then cut through the peritoneum into what I supposed would be the cavity of the abdomen, instead of which, was into a sac, bounded anteriorly by the abdominal parietes, posteriorly by a thick layer of false membrane, agglutinating the intestines together, so as to form one continuous sheet ; below by the pelvic viscera ; and the apex or highest portion by the umbilical opening.

The bulk of the intestines were crowded up to and surrounded the stomach. About a pint of coffee-looking liquid was in the sac. The color of the surface of the sac was a greyish black, and had a rough appearance ; odor very foetid ; a considerable quantity of flocculi lay on the posterior walls. Upon cutting into the ovary of the left side and the fallopian tube of the same, a quantity of yellow matter like pus was discharged. The uterus was about twice as large as natural, but presented no appearance of inflammation. The intestines were glued together by false membrane, very thin. This had lost its vitality doubtless before death, as it broke down very easy, there being no difficulty in separating the intestines ; the color of it normal ; condition of the stomach natural, as was also the Pancreas and Spleen. The liver was about three times its natural size, more especially the right lobe ; the intestines lying between the liver and the anterior parietal walls.

The color of the liver was a pale dirty brown and it was very friable. Upon examination I found it of that character called "fatty liver," and well marked. A slice upon three layers of paper and one of

muslin, greased them all through when cold. I had no time to examine the lungs, as they gave no evidence of disease during life. Without doubt the woman's death was caused by sub-acute puerperal peritonitis supervening upon her abortion; the discharged matter being the effusion into the sac; and the opening, a result of erysipelatous inflammation excited by the condition of the contained fluid.

The great matter of interest is, what gave rise to the fatty condition of the liver? Was it her previous intemperate habits, or was it some other cause yet unknown? The effect of alcoholic stimulus, when continued and carried to excess, upon the liver, has been as far as my personal observations have extended, and also of our best authors, to produce a Cirrhosis, a contracted and dry state of the gland. Usually, fatty liver is intimately connected with *phthisis*. During three years, Louis met with this fatty liver forty-nine times; and forty of these patients died phthisical. "It occurred in one-third of the whole number of the victims to consumption; whereas, among two hundred and twenty-three cases, not phthisical, there were only two examples of this hepatic change. Says Watson, "its presence is revealed during life by no symptoms, except that the enlargement belonging to it may sometimes be ascertained by percussion and pressure with the fingers. There are no symptoms peculiar to the fatty liver, and as to its cure we are quite helpless," which latter must necessarily follow. (In a pathological point of view.) Mr. Bowman informs us that these changes are owing simply to the unwonted abundance of certain small granules of fat, of which in the healthy organ, each lobule contains a few only.

Rokitansky says: "two conditions chiefly favor its production. In the first instance it very commonly accompanies tubercular phthisis; and according to the researches of Louis is found in two-thirds of all cases of phthisis. Andral has explained this occurrence on the ground of impeded secretion of hydrogen by the lungs; but extended investigation allows us to conclude that this impediment, which is not even demonstrable, is not the cause of the deposit; but that it is an essential constituent or pathognomonic combination of the tubercular dyscrasia, inasmuch as it allies itself with tubercular affections of every kind. Secondly, the fatty liver is also developed—independently of tubercle—in consequence of a luxurious and indolent regimen, in children that have been gorged with food, and especially as a result of dram-drinking. In this case it is accompanied by accumulations of fat in the omentum, the mesenteries, the pericardium, the heart and the subcutaneous cellular tissue, by fatty degeneration of the muscu-

lar fibres of the gall-bladder, and even of the muscular tissue of the heart; the common integument has a leaden hue, and perspiration has a greasy appearance and a peculiar odor. The fat throughout bears a resemblance to tallow."

Paget says: "As a general rule, spirit-drinking, and the excessive use of hydro-carbonous articles of food, while favoring a general formation of fat, are apt to give rise to special fatty degeneration in the liver or some other organ."

The causes of fatty liver lie, as yet, in the dark. The symptoms given by Rokitansky, when found with an enlargement of the organ, might, perhaps, aid us in diagnosing a case during life. Yet these are uncertain, and in the language of Watson, "as to its cure we are helpless." In our case above related, the intemperate habits of the deceased, may satisfactorily account for the condition of her liver, but how, we cannot explain.

The subject is one of interest, and truly demands from the profession more attention than it has as yet, received.

W. B.

Detroit, Dec. 1855.

ARTICLE V.

Hospital Report—St. Mary's Hospital.

Of the cases of fever admitted, the typhoid type still continues to be the most prevalent. In fact, of cases of intermittent fever there is an unusual scarcity even for this season of the year; the comparatively few cases admitted being almost entirely very chronic ones, presenting the inveterate debility and complicated functional disorders of the anæmic state, or with some superinduced local difficulty of such magnitude as to render necessity for immediate active operations imperative. Of such, have been a number of recent admissions with extensive dropsical effusions, the sequents of chronic hepatic and splenic derangements, the ordinary accompaniments of these diseases. And it is a noticeable fact, how these cases increase annually at this season over the number presenting themselves during the earlier months, and even over those presenting themselves during the months in which the miasmatic diseases prevail the most; showing that the

local difficulties in chronic intermittents are liable to be aggravated by cold weather, and the great liability to effusion as a consequence at this season. In ascites the operation of tapping has been performed thrice during the past month—twice on one patient and once on the second.

Several of the typhoid cases have presented phenomena out of the usual order ; of which was Schuster, German, admitted Nov. 5, with an irregular intermittent, the rigors occurring at first regularly each day for several successive days, but the fever continuous till the succeeding rigor, unrelieved by a sweating stage. From the commencement the patient exhibited a peculiarly affected state of the nervous system, by incessant involuntary movement of the muscles, more particularly observable in the rapid motion of the eye, when his attention was sought to be attracted in conversation, but affecting all the limbs to a very uncomfortable extent. A real *subsultus tendinum*, but unaccompanied with the state of debility from which this action results in the advanced stages of continued fever.

Notwithstanding usual treatment, which was followed by the cessation of the chills, the fever still continued, assuming a severer grade and lasting about three weeks, when he convalesced, but with the still persistent twitching of the muscles. For this he essayed a variety of modes of treatment, tonic, antispasmodic and alterative, but without success, until finally relieved by blistering the back. A narrow blister about five inches in length was placed each side of the spine in the lumbar region, from which he received immediate relief. There had been no complaint of pain or uneasiness in the course of the spine, at any time, except at the commencement of his attack.

CASE II.—Sinning, German youth, entered Dec. 3. Sick two weeks with typhoid fever ; delirious, but not raving, and presenting the subsultus tendinum as in the former case, but indubitably dependent upon extreme debility, or the toxic effects of retained effete material. Hot and pungent skin, and rapid pulse ; tongue dry and cracked ; bowels inclined to be costive, and kidneys acting moderately ; legs anasarous, and also effusion into the thoracic cavities, as evidenced by what first attracted the attention of the observer as peculiar, the great prominence of the thoracic walls, and by the respiration which was hurried and abdominal, and by auscultation which revealed only strong bronchial breathing, and entire absence of the cardiac sounds. The condition of the mucus membrane forbidding the present use of Quinine, was ordered small doses of Hyd. C. Creta and Spiritus Mindererus to correct and increase the secretions, and for several days with the

greatest benefit. The distension of the thoracic walls subsided to a great extent; the breathing became less hurried and more vesicular; the cardiac sounds again distinguishable. The effusion disappeared entirely from the legs; the pulse less rapid, and there was every appearance of convalescence. But these indications all proved fallacious, for on the evening of the 8th he quietly passed away. No necroscopic examination was had.

Of the other classes of disease which have come under treatment, besides the usual variety of minor ailments and accidents, the principal have been pneumonia and rheumatism. The former rather on the increase, the latter about as at last report. c.

ARTICLE VI.

*Proceedings of the Detroit Medical Society, reported for the
Peninsular Medical Journal.*

THURSDAY EVENING, NOV. 1, 1855.

Society met at the office of Dr. BRODIE.

Present—The V. P. Dr. Robinson, Dr. Lauderdale, Secretary; Drs. Brodie, Batwell, Davenport and Christian. By invitation—Drs. Pitcher and Fairbanks.

The Society was called to order by the Vice-President, and the minutes of the preceding meeting were read, and approved.

Dr. Batwell, Chairman of the Committee to whom was referred the question, "In what cases is it necessary to induce premature labor, and what is the best method." Reported, of which we give a brief synopsis.

The first remark to be made on the subject is to remind you of the fact that premature labor cannot be induced, or have spontaneous origin previous to the fœtus in utero, attaining the age of six months. Any expulsion of the fœtus before that time has received the name of abortion. But as the subject under discussion would, by this distinction, be very briefly disposed of, we intend to include under one head, both of these forms, and regard abortion and premature labor as identical. The cases requiring the induction of premature labor, are in the opinion of your committee, very few indeed. The most prominent is when the narrowness of the pelvis is so great that

it would be impossible for a fully developed foetal head to pass. The size of the pelvis in its normal state will be the first object presented to your notice. We will then briefly allude to the abnormal deviation from the usual standard.

(The report then proceeded to give a description of the pelvic diameters, and also of the diameters of the fully developed foetal head, which we do not deem necessary to insert.)

From the above description it will be seen that the head is naturally smaller than the pelvic diameter, but that any disproportion or increase of size must necessarily induce obstructed labor.

The question arises, how are we to find out the exact ratio which should govern our decisions with regard to the necessity of operating? Churchill thinks that if the sacro-pubic diameter be less than two and one-half inches, it would be impossible for a viable child at full term to be propelled through it. But when the diameter is three and a quarter inches, the operation is uncalled for.

Ramsbotham says, when the diameter is a little less than three inches, labor may be induced at the end of the eighth month, but that two and a half inches being the diameter, labor should be induced at seven months.

All English authors who have written on this subject, agree as to two and a half inches, being the smallest diameter through which it is possible for a viable foetus to pass.

The French writers alone are opposed to these doctrines. Their chief opposition is based on the ground of immorality of the practice. Baudeloque, Capuron, and others, distinguished writers, oppose the practice on these grounds, whilst the Royal Academy of Medicine, in Paris, have pronounced it a violation of all Divine law. As to the danger of the operation, all statistical reports show that the ratio is highly in favor of its performance, both as regards mother and child.

We now pass to the consideration of other diseases connected with pregnancy that may render the induction of premature labor necessary for the safety of both mother and child; of these, undue irritation of the stomach may prevent it from retaining sufficient food to furnish adequate nourishment for the system. Serous effusions may produce a train of symptoms dangerous to the life of the mother.

Frequent and continued floodings, or convulsions, under certain circumstances, may render interference necessary. And fibrous tumors may be so situated as to preclude the possibility of delivering a child at full term.

The Committee felt, that laying down any rule for this operation, a very delicate subject, as cases must frequently occur when it becomes obviously necessary for the practitioner to anticipate nature, and force her into action. These cases, however, were regarded as few, and ones never to be undertaken without due consideration, and the approbation of other medical men.

In reference to the second clause of the question, viz. : "What is the best method of performing the object we have in view." Churchill enumerates five methods of exciting uterine contractions :

1. Abdominal frictions, with warm baths.
2. Separating the membranes for two or three inches around the os.
3. Rupturing the membranes, and allowing the liquor amnii to escape.
4. Dilating the os by a piece of sponge kept in its place by plugging the vagina.
5. The exhibition of ergot of rye.

Of these methods the Committee would recommend a combination of the second and last method, viz. : the separation of the membranes from the cervix uteri, and the administration of the ergot, believing the effect of this drug never can be obtained unless the uterus was in a state of excitement.

The Committee suggested another method which appeared to them more worthy of consideration than any of those already mentioned, it being the method of Prof. Kewisch, of Wartzburg, and used with some modification by Dr. Tyler Smith. It consists of allowing a stream of cold water to fall against the os uteri for a space of ten or fifteen minutes continuously, then alternating with water at a temperature of 110°.

This method has not failed to bring on healthy contractions whenever it has been tried. It has also proved safe to both mother and child.

Dr. Pitcher remarked, that in addition to causes enumerated by the Committee as being sufficient to warrant the induction of premature labor, he had on one occasion met a case which seemed to him to demand this treatment. The case was one of severe neuralgia of the uterus, all other means of allaying the extreme sufferings of the patient having failed, he resorted to the induction of premature labor. He separated the membranes, and then punctured them, by making use of a lythotomy sound to perform the operation. Gestation had

reached the seventh month. The operation was successful with regard to both mother and child.

Dr. Fairbanks had met with a similar case, when he induced labor at eight months. He punctured the membranes. The mother recovered, but the child died.

Miscellaneous business being in order, on motion of Dr. Brodie the election of officers for the ensuing six months was postponed for two weeks.

The Committee on question for discussion not being prepared to report, was continued.

Society then adjourned to meet in two weeks at the house of the President.

Nov. 15, 1855.

Society met pursuant to adjournment.

Present—The President, Dr. Inglis; Secretary, Dr. Lauderdale; Drs. Robinson, Brodie, Klein, Batwell, Spence, Christian, Brown, Henderson, Cowan, and Davenport. By invitation—Drs. Pitcher, Stebbins, Watson, and Antisell.

Society being called to order, the minutes of the preceding meeting were read, and approved.

Reports of committees being in order, Dr. Henderson, in behalf of the Committee on question, reported the following for discussion, and report at the next meeting, viz.: "What are the conditions in which a child may be born in defect of vitality; and what is the best treatment to be pursued to remedy such conditions?"

Committee to report—Drs. Robinson, Davenport, and Lauderdale.

Committee to report a question for the next meeting—Drs. Davenport and Batwell.

On motion, the Society then proceeded to the election of officers for the next six months, when Dr. Inglis was unanimously re-elected President, Dr. Robinson, Vice-President, and Dr. Lauderdale, Secretary.

The President then delivered an able address, in which, with many cogent reasons for so doing, he strongly recommended our Western Medical Colleges to the fostering care of the medical profession of the west.

On motion of Dr. Brodie, the thanks of the Society were tendered to the officers for the satisfactory and impartial manner in which they have discharged the duties of their respective offices, during their late term of office.

On motion of Dr. Brodie, the thanks of the Society were tendered to the President, for his able and interesting address.

The Society, then, at the invitation of the President, retired from "labor to refreshment," and partook of a handsome collation prepared for them by his estimable lady, Mrs. Inglis, after discussing which, for an agreeable length of time, adjourned to meet at the office of Dr. Brown, in two weeks.

W. B.

SELECTIONS:

EXPERIMENTAL RESEARCHES INTO ANIMAL HEAT IN THE LIVING AND THE DEAD BODY.

BY BENNET DOWLER, M. D.

(Continued from page 271.)

The periodical plan of publishing these researches forbids systematic arrangement, permitting but short excursions upon only a few of the numerous paths to be explored. Hence the necessity of frequently falling back upon the original point of departure, in order to rest a little and prepare for re-examinations of the various routes.

It is hoped, that these fragmentary papers will not be judged definitively, except as a whole. The more experimental portions of these researches will, probably, appear in future numbers of this Journal, unless contributions from other hands shall be received in sufficient number to occupy its original department.

It is not intended on this occasion to propound a general theory of fever. Since the comparatively modern theories of Cullen, Brown and Broussais have fallen into oblivion, medicine has abdicated general theory as insufficient to account for the multiform phenomenal manifestations of life, health, disease, and therapy. Observation, experimental investigation and deductive reasoning tend more and more to eliminate scientific principles, none of which, however, possess complete universality explanatory of all the complex phenomena of the science. It can never happen, indeed, that an experimental science like medicine can arrive at a single truth which is at once necessary and universal, such as the infinity of duration or the boundlessness of space is.

Indeed, medicine seldom can say of its observations, experiments and conclusions, even this, namely: so far there is no exception.

While, as before stated, no absolute theory of fever will be proposed at present in connection with these researches, yet it may be proper to remark, that the popular opinion in all nations, languages

and times has recognized fever as a morbid heat (internal or external); indeed, the most learned physicians coincide with this simple and literal interpretation.

The distinguished pathologist, Hufeland, says that "every fever is indispensably accompanied with an increased generation of *heat*."—This rule may hold good even in congestive and algid fevers, if it be admitted that heat is unequally distributed, so that the centres may be hot while the circumference is cold, which, independently of its subjective affirmation by the patient is not without proof.

All attempts to define fever by acceleration of the pulse, irritation, debility, or the like, without including increased heat as the fundamental characteristic, have failed to disturb or alter this universal belief of mankind, namely, that fever is an unnatural heat.

If fever can be characterized by a single symptom, preternatural heat must take the precedence, being paramount. It was so regarded by Hippocrates, Galen and others, among the patriarchs of ancient medicine. Galen considered that the preternatural heat of fever originates in the heart, whence it is diffused throughout the whole system: *calor quidam præter naturum in corde generatus*.

Of the importance of heat or caloric, Hippocrates expresses the most exalted, not to say exaggerated opinion: *Quod calidum vocamus id mihi et immortale esse videtur, et cuncta intelligere, et videre, et audire, et scire, omnia, tum, præsentia tum futura*. (*Lib. de carn. c. i.*) He describes fever as a fire: "Hippocrates febrem appellat ignem."

Although Celsus, the Roman Hippocrates, the greatest medical classic of the Augustan age, regards fever as the heating of the body, he cautions the practitioner not to be deceived by the temporary increments of heat occasioned by exposure to the sun, labor, &c.: *Altera res est, cui credimus, calor æque fallax; nam hic quoque excitatur æstu, labore, &c.*—He affirms that heat causes hæmorrhages, inflammations, syncope, &c.: *Denique omnis calor et jecur et lienem inflammat, mentem habetat; ut anima deficiat, ut sanguis prorumpat, efficit*, (*l. ii., c. i.*). In his lucid definition of inflammation, heat is a fundamental element: *Notæ vero inflammationis sunt quatuor, rubor, et tumor, cum calore, et dolore*. (*l. iii., c. xi.*)

This same Aurelius Cornelius Celsus, nearly twenty centuries ago, denounced the atrocious practice, now too prevalent, of suffocating the patient affected with ardent fever, by piles of bed-clothes upon his body already too much heated, and at the same time excluding free currents of pure air from the sick chamber: *eo conclavi tenendus, quo multum et purum aerem trahere possit; neque multis vestimentis strangulandus, sed admodum levibus tantum velandus est*. (*l. iii., c. vii.*) Of this strangulating practice and its false philosophy, an analysis may be expected hereafter.

Febrile uneasiness, malaise, irritation, vertigo, acceleration of the pulse, hurried respiration, &c., are doubtlessly due to morbid heat, local or general, internal or external, acting on the solids, liquids and gases of the body, as the nerves, muscles, blood, &c. Headache augments with the heat. Exposure to the sun or fire often excites head-

ache in persons otherwise healthy. Febrile uneasiness, dizziness, loss of appetite, debility, thirst, and sleeplessness during hot sultry weather, will often affect an entire population. Sunstrokes, the most acute and dangerous of all maladies are examples of the deleterious effects of solar heat. Many types of a similar character might be enumerated.

External heat is probably one of the essential conditions, if not the cause of yellow fever; at least, this disease does not appear in the winter seasons in the temperate zones, nor does it appear in all parts of the torrid zone, even the hottest. It is probable that heat may undergo alterations from local causes deleterious to man, though these may not be indicated by the risings or fallings of the quicksilver. In persons from northern latitudes, there is, in hot climates, probably, not only an unaccustomed absorption of free caloric, but an increased amount rendered latent, which predisposes to yellow fever, even though no modification of this agent be the *vera causa* of this disease.

Preternatural heat is directly deleterious, whether in the form of a fever, a phlegmon, an inflammation, or a burn. It is a positive, a known agent, and not an imaginary constitution of the air, a gas, or contagion, with which many ætiologists would explain the phenomena of disease. It accumulates often injuriously in one organ, while it becomes unnaturally depressed in another; and is, perhaps, normal in no disease whatever. In an extensive burn, not immediately fatal, a subjective sensation of cold, a violent shivering, and rigors take place, followed by re-action; congestions and effusions occur in the brain, and in the mucous membrane of the intestines, all tending to complete the general analogy between a burn and fever—between external and internal heat in certain developmental limits.

The principal elements which enter into the organization of the living being are of the most combustible character, as oxygen, carbon, hydrogen, sulphur, phosphorus, &c. These elements and their manifold combinations, it may reasonably be supposed, would be altered, if not destroyed and devitalized by an unnatural though very limited augmentation of heat. It has been found by many direct experiments that animals placed in a high temperature, 140° and upwards, die as soon as their bodies become heated about 9° beyond their normal temperature. In sunstroke of the first degree, always fatal, I have found in a man a higher temperature than this in both the living and recently dead body, as will be shown elsewhere.

If life were the result or the condition of matter having a certain definite arrangement, like that of a crystalline body whose ultimate molecules are endowed with an inherent property, causing them to assume the form of a cube, pentagon, hexagon, or other symmetrical figure, it may be readily conceived that morbid heat would modify, alter or derange these special vital arrangements and essential conditions, the sum of which is denominated life, health, animal well-being and vital unity. If life be derived only from life, and be transmitted only from parent to child, still its continuance is compatible with but a limited range of temperature, beyond which physical and chemical relations become paramount.

If heat be not the cause, it is the essential condition of organic life, either directly or indirectly. Its inherent mechanical power is limitless. Its power of transformation is almost omnipotent. Its diminution converts water into a rock-like solid, its increase into explosive steam. New chemical affinities, combinations and decompositions, solid, fluid, gaseous and volatile, result from its slightest changes.

The Influence of Internal and External Heat upon the Digestive Process.—About ten years ago, the medical journals reported from the *Comptes Rendus*, and other French publications, M. Blondlot's numerous experiments, showing that the digestive property of the gastric juice does not depend upon its chemical constitution, but upon a peculiar organic principle, which is totally destroyed by a temperature of 104° (Fah.) and upwards. The experiments were made upon a dog, in which a fistulous opening in the stomach was made, and kept open for two years. MM. Bernard and Barreswell subsequently investigated this subject, and arrived at the same conclusion in regard to the influence of temperature in destroying the digestive power of the gastric fluid.

"During the febrile diathesis," says the late Dr. Beaumont, "very little or no gastric juice is secreted. Hence the importance of withholding food from the stomach in febrile complaints. It can afford no nourishment, but is actually a source of irritation to that organ; and, consequently, to the whole system." In other part of this paper it will be seen, what, indeed, everyone already knows, that this gentleman's opportunity of testing this and many kindred questions, in the person of Alexis St. Martin, has never been equalled, although some of the mighty men of medicine are now proclaiming the dogma, "Feed a fever!" A wonderful leap from the extreme starvation of Broussais and his co-adjutors of the gastro-enteric theory of fever.

Celsus maintains that even external heat not only causes relaxation, debility, sleeplessness, dissolving sweats and predisposition to pestilential diseases, but it arrests the digestive function: *Calor concoctionem prohibet, somnum aufert, sudore digerit, obnoxium morbis pestilentibus corpus efficit.* (l. i, c. ix.)

The rule which Celsus lays down, namely, not to give the patient food during violent pain, nor during the increment of disease, nor until there is a tendency to convalescence, is, for most of acute Southern diseases, salutary: *Neque inter magnos dolores; neque in crescente morbo, tutem est, ægrum cibo impleri; sed ubi inclinata jam in melius valetudo est.* (l. iii, c. vi.)

Additional Physical and Physiological Illustrations of Animal Heat.—M. Magendie admits, that in respiration the air expired passes from the Lungs at the same temperature with the body. (Physiol.) This whole subject, says Mr. Paget, in his report ten years ago, on the progress of medical science, has been very carefully examined by Valentin and Brunner, who operated on large quantities of quietly respired air. Their results are as follows. 1. The expired air has always been (even in widely varying external temperatures) of a temperature of from 97.25° to 99.5° F.; most frequently the latter.

2. It is always saturated with watery vapor. 3. The chemical changes are due to the simple diffusion of the gases taking place between those of the atmosphere and those of the blood.

The facts here related are important, whatever may be thought of the theory assumed in order to explain them. Here, the air receives rather than originates heat in the lungs. In the Polar regions, with a temperature of 200° below that of the body, the air returned from the lungs acquires heat to that amount. How the respired air at more than 100° below zero, should give out caloric for the whole body and yet receive such a vast amount for itself, is puzzling. It would be more satisfactory to assume that the nutritive, capillary, or some other process peculiar to vitality, generates the heat which the lungs impart to the inspired air; the assumed furnace, the fuel, the combustion, and the formulæ of the chemists to the contrary notwithstanding.

The air, *as air*, on entering the lungs might, by great compression or condensation, which, however, has no existence, yield heat as a wet compressed sponge yields water; but in that case the air discharged would be condensed, and would have its temperature correspondingly low, instead of passing out greatly heated and expanded. The refrigeration of the air expired would be in an inverse ratio to the disengagement and absorption of the heat from the air inspired. Those who cannot but admit this physical view of compensations, fall back upon the chemical respiratory theory which has been already mentioned.

Blushing and Blisters.—Blushing which originates in psychical emotion manifests itself in increased heat, redness and capillary distention. Whether the psychical force is transmitted from the heart or acts directly on the blood and capillaries of the face is not certain. The latter is the most probable reference. Dr. Carpenter attributes blushing to the nerves (Phys. § 603), and yet in § 604, his admissions, that the capillary circulation, nutrition, secretion, &c., are essentially independent of the nervous agency, go to show his assumption that blushing and pallor are nervous actions must be gratuitous as well as contradictory—contradictory for blushing, he says, “consists in a sudden enlargement of the capillaries and small vessels of the surface,” phenomena belonging to the circulation itself, which circulation, among other functions, as he asserts in the same page, is essentially independent of the cerebro-spinal nerves. If these numerous and more complex functions can be accomplished without any nervous agency, why may not the simpler and more transient ones be equally independent? There is no proof that blushing is in the nerves; there is proof that it is in the capillaries. In neither case can we explain the psychical *modus operandi*. We cannot prove by consciousness, or sensuously, that the nerves are the agents in this case.

No one has ever supposed that blushing originated in “the furnace of the lungs,” though “sighing like a furnace” has. It is utterly inconceivable how blushing could have a respiratory origin in an increased respiratory oxydation, and the more so because the development of blushing takes place instantaneously, while respiration,

oxydation and circulation would require an appreciable time, and would heat and redden other tissues traversed nigher the furnace before reaching the face.

A blister, and still more speedily a sinapism, though cold, will, when applied to the skin, cause a considerable development of heat. The erectile tissue, simultaneously with a sudden influx of blood has an exaltation of temperature. Will any one pretend in this case, that the animal heat evolved originated in the lungs by increased respirations and charcoal fires?

The increased friction of the muscles and of the blood may possibly serve, in some degree, to explain the increased temperature which takes place during active exercise; yet, in the dead body, wherein the temperature is the highest known, this cannot apply any more than the respiratory theory.

Surgical Illustrations and Experiments.—Speculative physiologists maintain that, when an artery which supplies a part with blood is tied, “heat is no longer disengaged from it.” The pain and other modifying circumstances do sometimes produce temporarily such a result.

A young man received a slight stab with a pen-knife in the armpit, which having punctured the axillary artery, caused a small elongated aneurism, for which, some weeks afterward, Dr. Mercier, of New Orleans, tied the subclavian on the second day of November, 1843. The arterial pulsations immediately ceased in the arm. During the next day I found the temperature of both arms precisely the same, that is 102° . The nutrition of the aneurismal arm constantly declined, having become greatly withered, and was much smaller than the other at the time of the patient’s death, sixteen days after the operation.

In the surgical papers of the late Sir Astley Cooper, the following experiments made by him are recorded, being not the less valuable because they oppose his theory (the usual one) of the origin of animal heat.

Sir A. Cooper ligated the pneumono-gastric nerves, “in six cases, in rabbits, for the purpose of showing the gradual decrease of animal heat.” This decrease, he confesses, “does not invariably occur.” In two out of the six experiments the contrary happened; “in the last, the temperature increased until the last moment:—

Exp. fourth—Respirations per minute before the operation, 128; heat, 104° . After, 52; heat, $102\frac{1}{2}^{\circ}$. Two hours after, 48; heat, $101\frac{1}{2}^{\circ}$. Four hours after, 52; heat, $102\frac{1}{2}^{\circ}$. Six hours after, 60; heat, $104\frac{1}{2}^{\circ}$. Eight hours after, 60; heat, 95° . Eight hours and three-quarters after, ceased; heat, 90° .

Exp. sixth—Respiration per minute before the operation, 96; heat, 104° . After, 56; heat, $102\frac{1}{2}^{\circ}$. Two hours after, 68; heat, $102\frac{1}{2}^{\circ}$. Four hours after, 52; heat, $102\frac{1}{2}^{\circ}$. Six hours after, 72; heat, 104° . Eight hours after, 52; heat, $105\frac{1}{2}^{\circ}$. Ten hours after, 48; heat, 102° . Ten hours and three-quarters after, ceased; heat, 98° .

It will be seen here that there is no correspondence between the number of respirations and the heat: thus, in the experiments, the decline of the former was followed by the increase of the latter.

In one case, the respirations had declined more than half, while the heat rose $\frac{1}{2}^{\circ}$; in the other case, at the end of the eighth hour, the heat had increased $1\frac{1}{2}^{\circ}$, while the respirations had declined nearly half. These experiments or vivisections, made upon the great central nerves, specially distributed to the lungs, stomach, &c., bear equally against the neurological theory of animal heat.

Spontaneous Human Combustion and the Emission of Light from the living Body.—How far light and heat may be identical—whether caloric be “the active principle in light”—whether they be material or immaterial, emanative or undulatory, are questions foreign to the purpose of these researches; but inasmuch as they stand nearly related,* and exercise a vast influence upon life, health, disease and decay, it may be proper to allude to some of their phenomenal manifestations which the reader will explain, if he can do so. May Virgil’s benediction be his! *Felix qui potuit rerum cognoscere causas.*

From the most authentic accounts, it appears spontaneous human combustion happens oftenest to female drunkards, advanced in life, and that it proceeds with great rapidity, destroying the trunk usually and differs from ordinary combustion, inasmuch as it takes place without the usual development of heat, seldom igniting the combustible materials in contact with the body consumed.

Phosphorescent luminosity, emitted from decaying timber and many bodies organic and inorganic bodies, has sometimes occurred in the human body, chiefly at the approach of death and mostly among drunkards. Sir Henry Marsh, M.D., of Dublin, who has reported several cases of the evolution of light in the living human subject, advances the following explanatory opinion concerning this phenomenon, namely:—“That all disease is incipient death, wherein the laws of vitality are gradually succumbing to the laws of chemical affinity and general attraction; during which struggle it is possible that the progress of chemical changes in vitalized structure may develop adventitious properties as light, &c.”

“The Liverpool Pathological Society report, that a patient in the poorhouse, aged 47, formerly a drunkard, though he had drunk no spirits for six weeks before his death, was observed, on the night of the 16th of Nov., 1844, to emit a luminous breath during twenty minutes before death. This red-hot or red-coal like appearance was witnessed by two persons. The man had been suffering from intestinal hæmorrhage, anasarca, cough and expectoration. There was no *post-mortem* examination.”

“A large cancerous sore of the breast emitted light enough to enable the hands of a watch-dial to be distinctly seen, when it was held within a few inches of the ulcer.” (Carpenter.)

Wm. Huggins, M.D., of Trinidad, July 10th, 1845, communicated to the London Lancet “the case of H. McCullom, carpenter, habitual drunkard, who died the preceding August, emitting a bright red

* Dr. Whewell says, recent researches tend to produce a strong disposition to believe that light and heat are so closely connected that they can hardly be separated, having so many various properties in common, are propagated by the same machinery, &c. (*Hist. Induc. Sci.* ii, 601, new edit.)

spark of fire from his mouth. A *post-mortem* examination showed disease of the stomach, enlarged nutmeg-liver, and the lungs affected."

Physiological Illustrations of Animal Heat.—The following experiments upon one middle-aged individual, in good health, were made with all possible accuracy. Omitting tabulated details, results only will now be given:—

Temperature of the hand for ten consecutive days, ending with the 16th of Jan., 1844, together with the temperatures of the room and the open air, were noted from 7 to 10 A.M.: also, at noon, and at 3 and 9 P.M. The weather was generally cloudy, the rains frequent and copious, the winds variable, with occasional thunder; fogs prevailed to an extraordinary degree; the minimum temperature of the air, $39\frac{1}{2}^{\circ}$; the maximum, $79\frac{1}{2}^{\circ}$; the lowest temperature of the room at 7 to 9 A.M., 61° ; highest, $73\frac{1}{2}^{\circ}$; at noon, 68° to $74\frac{1}{2}^{\circ}$; at 3 P.M., 67° to $75\frac{1}{2}^{\circ}$; at 9 P.M., 70° to 77° .

Each experiment on the hand lasted fifteen minutes. The whole series gave the following average results:—6 A.M., in bed (room without fire), 98.45° ; 7 to 10 A.M., parlor, 90.15° ; noon, 97.71° ; 3 P.M., 97.15° ; 9 P.M., 98.45° .

The following experimental history extends to nine days, commencing at the close of the former experiments, amounting to eighteen consecutive days, ending Jan. 24th, 1844.

I may here remark, that while sitting in a room artificially warmed, the hand holding the instrument was always turned from the fire, and rested upon a table covered with a woolen cloth. During the experiments the hand was never opened. The temperature was usually noted every minute, or every five minutes, though not always so mentioned in this paper, from a wish to be brief in details.

Jan. 16th, 7 A.M.—Room, $65\frac{3}{4}^{\circ}$; experiments one hour in bed; perineum, 100° ; pressing the sole of the foot against the internal maleolus, $97\frac{1}{4}^{\circ}$; axilla, 100° ; bend of the elbow, 98° ; left hand, 98° . Left the bed, dressed, put on no coat, in 30m. the hand gave only $90\frac{1}{4}^{\circ}$.

$3\frac{1}{4}$ P.M.—Room, 68° ; dressed; the left hand, after a trial of 35m., 98° ; water at $61\frac{1}{2}^{\circ}$ was applied repeatedly to the forehead for 37m.; during this time the heat of the hand fell 8° ; the person well clothed. Was the whole system cooled 8° ? The face became pale, afterwards flushed.

Jan. 17th, $6\frac{1}{4}$ A.M.—Bed-room, 46° ; left-hand not covered by the bed-clothes, in 23m. gave 92° ; after leaving the bed 8m, without dressing, it fell to 85° ; partly dressed, 20m., 80° . In a room with a fire, air at 59° ; in 15m., hand, 75° . Here a slight exposure to a moderate cold caused a fall of 17° . Went into the open air at 46° ; water at 38° was applied to the face and both arms at intervals for 11m.; the hand fell to 72° ; breakfasted 15m., repeating the cold occasionally, 70° ; went into the room where the fire was, as above, in 15m. declined to 67° ! At 10 A.M., the left hand was 96° ; clothed; room, 66° ; good fire. Rolled up the cuff, applied water at about 44° to the wrist with a sponge &c., at intervals; in 40m., the heat fell to 80° ; in 15m., to $74\frac{1}{2}^{\circ}$; cold now applied to the

forehead only, 10*m.*, $70\frac{1}{2}^{\circ}$; cold now withdrawn; sat by the fire 15*m.*; hand, 68° ; 15*m.*, 69° ; 10*m.*, 81° ; 15*m.*, 93° ; 30*m.*, 98° ; 10*m.*, 99° .

The refrigeration progressed as long as the experiments lasted: in the first case depressing the temperature, in 1*h.*, 24*m.*, from 92° to 67° , a difference of 25° ; in the last case, occupying nearly the same length of time, the fall was 28° ; in 15*m.* after the withdrawal of the cold, aided by a comfortable fire, the hand was still 3° below the point of departure, but in 40*m.* rose 3° above it.

Jan. 18th, noon.—Room, $65\frac{3}{4}^{\circ}$; coat off, the left hand, $97\frac{1}{4}^{\circ}$; about 12 lbs. of water at 50° used for a foot bath; 5*m.* while undressing, the hand fell to 95° ; 5*m.* while using the foot bath, to $90\frac{1}{2}^{\circ}$; 15*m.* while exposed to the air, to 89° ; 5*m.* without coat, to 88° .

Jan. 19th, 6 A.M.—Room, $54\frac{1}{2}^{\circ}$; the left hand in bed, 100° ; arose, dressed partially, in 25*m.*, $90\frac{1}{2}^{\circ}$; applied water at 53° to the forehead, face, and opposite hand at intervals, sitting in a room at $62\frac{1}{4}^{\circ}$, the back towards the fire, in 48*m.* the heat fell to 83° , and remained stationary 10*m.*, as long as the experiment lasted. No cold was applied to the left arm, which was clothed as usual, except the coat. The refrigeration was through the right hand and forehead, the instrument in the left hand, as in all the other experiments, was not changed after leaving the bed.

9 P.M.—Room, 70° ; the left hand, 99° ; removed coat, vest, cravat, opened shirt collar, and in 15*m.* the heat fell to 94° .

Jan. 20th, 6 A.M.—Bed-room, $63\frac{1}{4}^{\circ}$; in bed, left hand uncovered 15*m.*, 99° ; axilla, 10*m.*, $99\frac{1}{2}^{\circ}$; femoral region, 10*m.*, $98\frac{1}{2}^{\circ}$; perineum, 5*m.*, 101° ; popliteal region, 5*m.*, nearly 99° . Dressed, except coat and vest, 10*m.*, 92° ; about 4 lbs. water at $63\frac{1}{2}^{\circ}$ applied at intervals with the right hand to the forehead and face; in 40*m.* the left hand declined to $83\frac{3}{4}^{\circ}$, and was still falling when the experiment ended.

12 M.—The left hand being at 99° , the clothes on, sitting by a good fire, the room 68° , the right hand and wrist were immersed in one gallon of water at $63\frac{1}{2}^{\circ}$; in 25*m.* the left hand fell to 97° ; in 15*m.* to 93° ; (cold being also applied to the forehead several times). The right hand, now wiped dry, received the thermometer at 93° ; in 10*m.* the mercury stood at 73° ; in 5*m.* rose to 74° .

Jan. 21st, 5 A.M.—Room, 68° ; in bed, hand exposed 10*m.* and 5*m.*, each observation gave $98\frac{1}{2}^{\circ}$; popliteal region, 8*m.*, 100° ; perineum, 5*m.*, 101° ; elbow, at the fold, 5*m.*, 99° ; left hand, 5*m.*, 100° ; instep and sole, 99° ; by increasing the bed-clothes, the left hand gave, in 8*m.*, 101° . Left the bed and sponged at intervals with water at $65\frac{3}{4}^{\circ}$; in 15*m.*, the hand was 97° ; friction with a towel 5*m.*, 95° ; 5*m.* while dressing, $94\frac{1}{2}^{\circ}$; 5*m.*, 93° ; 10*m.*, stationary, and then began to rise; in 15*m.* the axilla was 99° .

Jan. 22d, 6 A.M.—Room, 68° ; perineum, groin, popliteal and hand, each 100° ; femoral, instep and sole, 99° ; while dressing, and after, the left hand fell in 15*m.* to $97\frac{1}{2}^{\circ}$; in 27*m.* (occasionally applying water at 68° to the forehead) it gave 92° .

10 A.M.—Air, 68° ; sat in the open air of a porch after walking

several squares, the weather growing warmer 1° per hour; in 65*m.* the hand fell to 78° , and was then declining, being then 22° less than when in bed 5*h.* before.

It will be seen by some of the preceding experiments, that cold air and cold water, even partially applied, in rooms with and without fire, cause a reduction of the temperature sometimes 33° or 34° below the natural heat; this depressed temperature so far from disappearing in a few minutes continues for an indefinite period, probably involving the whole system as well as the accessible points upon the surface, as appears, perhaps, analogically during refrigeration from applying cold to the forehead, opposite arm, and to the feet, while the rest of the body may be clothed comfortably. No injurious effects resulted from these refrigerations, except, perhaps, a boil just above the knee.

Jan. 23d, 6½ A.M.—Room, 74° ; in bed—hand, instep, sole, ankle, axillary, inguinal, perineal and popliteal regions, each 100° ; at 9½ A.M., room, 71° ; hand in 20*m.* gave $88\frac{1}{2}^{\circ}$; at 11 A.M., room, 72° ; hand in 21*m.* gave 95° ; at 9 P.M., room, 75° ; the hand in 15*m.* gave 99° ; the perineum and axilla the same.

Jan. 24th, 7 A.M.—Room, 72° ; in bed—hand and axilla, 100° ; groin, instep, femoral, elbow, and tongue, 98° each. At 9 A.M., room, 74° ; hand in 15*m.*, 96° .

The maximum of the room in which the experiments took place was 77° ; the minimum, 46° ; the average, about 65° .

Experiments on the temperature of the hand, in the winter, for ten consecutive days, at 7 to 10 A.M., at noon, at 3 and 9 P.M.; the minimum of the room, $39\frac{1}{2}^{\circ}$; maximum, $79\frac{1}{2}^{\circ}$; average, 68° ; each experiment having lasted 15*m.*, the whole affording the following results; the averages only will be given:—Average, 6 A.M., hand in bed, 98.45° ; average, 7 to 10 A.M., 90.15° ; average, noon, 97.71° ; average, 3 P.M., 97.15° ; average, 9 P.M., 99° .

The hand is in many respects an inconvenient place for taking the temperature. If both hands be used, the palms compressing the instrument between them, the services of a second person will be required, in order to note the experiments.

There can be no doubt whatever that even a moderate application of cold, if persisted in, will produce a great and prolonged reduction of animal heat, extending apparently to the whole system—a fact of great pathological significance and therapeutic value in calorific excitements, irritations, inflammations, and fevers, of which more hereafter.

The following experiments on the temperature of the hand, at 9 P.M., were continued nine days longer (in a room where fires were kept); each observation lasted 15*m.* The lowest temperature of the room was $65\frac{3}{4}^{\circ}$; the highest, $75\frac{1}{2}^{\circ}$; two days clear; two days thin clouds; one day rainy and foggy; one day foggy and cloudy; two days cloudy; mosquitoes prevailed four days. Temperature of the hand, for nine days, at 9 P.M., $98\frac{1}{2}^{\circ}$, $97\frac{1}{2}^{\circ}$, $98\frac{1}{2}^{\circ}$, 98° , 100° , 99° , 99° , $96\frac{1}{2}^{\circ}$,—averaging 98.37° .

It will be seen that the average temperature of the hand, at 9 P.M.,

in a room with a fire, agrees with that of the hand in bed at 6 A.M. In a few hours after leaving bed the temperature declined nearly 8° , but rose by noon 7° to 8° , remained nearly stationary at 3 P.M., and reached its average maximum of 99° , at 9 P.M.

(To be continued.)

CONSIDERATION ON THE RECIPROCAL INFLUENCE OF THE
PHYSICAL ORGANIZATION AND MENTAL MANIFESTATIONS'

BY A. O. KELLOGG, M. D., PORT HOPE, C. W.

THE CEREBRAL AND DIGESTIVE SYSTEMS—THEIR RECIPROCAL AND
SYMPATHETIC INFLUENCES.

"I think with Alexander, that the act
Of eating, with another act or two,
Makes us feel our mortality. in fact,
Redoubled: when a roast and a ragout,
And fish, and soup, by some side dishes baked,
Can give us either pain or pleasure, *who*
Would pique himself on intellects whose use
Depends so much upon the gastric juice?"

Don Juan, can. V, verse xxxii.

"Last night suffered horribly from an indigestion. I remarked, in my illness, the complete inertion, inaction and destruction of my chief mental faculties. I tried to rouse them, and yet could not. I should believe that the soul was married to the body, if they did not sympathize so much with each other. If the one rose when the other fell, it would be a sign that they longed for the natural state of divorce; but, as it is, they seem to draw together like post-horses."—*Byron, Diary*, 1821.

In our last article we took a cursory view of some of the pathological conditions which affect the mental manifestations primarily, or *idiopathically*; we now proceed to consider such as influence these *secondarily*, or *sympathetically*, through the medium of other and distant organs of the body.

There is no organ of the body between which and the brain the sympathy is more marked and direct than the stomach. This is due, no doubt, to the intimate nervous connection which exists between these organs—both direct, by means of the pneumogastric nerves, and indirect, by the sympathetic and spinal nerves. This sympathy is manifested in various ways. One of the first and least variable effects of severe blows upon the head is to excite vomiting; and vomiting is

not only excited by substances taken into the stomach, when the pneumogastric nerve evidently becomes the excitor, but it is also induced by the taste of any disagreeable substance, or the sight or smell of any disgusting object, or the mere conception of such. It may also be excited by a simple mental emotion.

A singular instance of the influence of a simple mental emotion upon the stomach has just been given me by a scientific friend, a distinguished engineer, with whom I was conversing on this subject. He informed me that, when a boy, he frequently crossed a stormy arm of the sea, with his father, in a small steamboat, on their way to Edinburgh, and was often sea-sick. On the boat there was constantly an old, blind fiddler, who always contrived to render the sea-sickness of the passengers more tolerable (or intolerable) by his strains. For years after, my friend informs me, he could never hear a violin without feeling a species of nausea, and experiencing the symptoms of sea-sickness.

The depressing influence of a fit of indigestion on the mental faculties—the confusion of thought, or of ideas, lowness of spirits, headache, vertigo, despondency, &c., must have been felt by all at one time or another. The impaired memory—the impossibility of fixing the attention, for any length of time, upon a given subject—the fickleness, unnatural irritability of temper and disposition, are all among the well-known phenomena attendant upon a fit of indigestion; and the manifestations of *mind*, both moral and intellectual, though sometimes slightly and imperceptibly, are almost always more or less affected. It is not, therefore, surprising that a prolonged continuance of all the “horrors of indigestion” should lead to insanity. And it has been argued, with much apparent justice, by M. Broussais and several recent writers in this country and Europe, that the functional disorder thus sympathetically induced in the brain may, by its frequency or continuance, pass into organic change. It is far easier, however, to trace the sympathetic relations between these organs than to determine the first link in the chain of morbid sympathies. “Headache,” says Dr. Copeland, “has too generally been referred to disorders of those viscera of the abdomen with which the head sympathizes, even when manifestly proceeding from morbid states of the parts enclosed by the cranial bones.” “Besides,” says he, “those very disorders so generally considered the sources of headache are not unfrequently produced by an affection of the brain: for pain of the head, although a common symptom of it, is neither universally nor constantly present, but is very frequently altogether wanting, at an early or advanced period; so that disease of the brain itself, may, in the first place, disorder the digestive or other functions, this disorder reacting upon the brain, or on the nerves more immediately related to it, and exciting or otherwise altering their sensibility so as to give rise to headache, and other symptoms actually dependent upon the brain, although developed and rendered manifest by the sympathetic disturbance of the digestive organs.” There is, perhaps, no disease more illustrative of the intimate sympathy which exists between the cerebral and digestive systems than dyspepsia; and the conflicting opinions among the most

eminent writers as to the nature and origin of this disease, and the unsatisfactory and unsuccessful methods of treatment proposed and adopted by these men, each suited to his peculiar theory as to its nature and origin, show that this sympathy has not been sufficiently attended to.

For many years dyspepsia was regarded as a primary disease of the stomach—a disease of “debility” of this organ, and tonics and stimulants were the chief remedies proposed. Subsequently, by the disciples of that school who professed to found their opinions upon the pathological appearances, it came to be regarded as primarily an inflammatory affection of the digestive mucous membrane, and the “antiphlogistic” treatment, bleeding, low diet, &c., were the remedies prescribed in all cases. Subsequent to this still, when came to be observed that the gourmand, he whose “god was his belly,” and who thought of little else during life than how to satisfy its morbid cravings, was not the peculiar subject of this disease, but he who “took little thought of what he should eat or what he should drink,” but who, nevertheless, thought long and deeply on other and far more important matters—he, in short, who overwrought the *cerebral* and not the *digestive* system, was its peculiar victim, more correct ideas as to its nature and causes came to be entertained. The late Dr. Brigham was of opinion that a large majority of cases of dyspepsia, especially among students, depend upon primary irritation of the brain and nervous system,—that such cases were perpetuated by mental excitement, and best relieved by those means calculated to give rest to the cerebral organs; and among the reasons for this opinion, independent of his own experience, he gives the following, which, though familiar, undoubtedly, to most readers of this journal, cannot be too often repeated.* In opposition to the theory of Broussais, who regarded dyspepsia, in most cases, as a *primary* affection of the stomach, even when preceding insanity and accompanied by long continued hypochondriasis and other nervous symptoms, he says: “To me it appears more rational to suppose that the irritation of the brain, produced by the moral cause, not only caused the disorder of the digestive organs, but, by its continuance, increased the disease of the brain to such a degree as to cause mental derangement; just as we see a blow on the head produce, at first, only slight sickness of the stomach and vomit-

* See “Mental Cultivation and Excitement,” p. 166. *et. seq.* This unpretending, but able and philosophical little work should be in the hands of every parent and teacher in the land. No one can fail to be benefited by it, for no writer of our own country or Europe has written more ably on the influence of mental cultivation and excitement upon health than the late Dr. Brigham, whose name cannot be mentioned by any one who values the medical literature of his country without feelings of deep veneration and respect for his memory, particularly if, like the writer, he had the honor of his friendship for a number of years. The question once tauntingly thrown out by a foreign critic, “Who ever reads an *American* work?” was never more triumphantly answered, except perhaps, in the case of Mrs. Stowe. The little work “was hailed—it may be said, *seized upon*,” says Mr. Simpson, in his preface to the Edinburgh edition; and Dr. Macnish uses language equally strong and flattering; and the distinguished Wm. Cobbett, shortly before his death, “declared his intention of having a cheap edition printed ‘to abate,’ as he said, the nuisance of infant schools.”

ing, but followed by violent delirium. From the cases which Broussais has given, it evidently appears that slight irritation of the brain, from mental or other causes, gives rise to derangement of the stomach, and produces the ordinary symptoms of dyspepsia." As regards sick-headache, he is much of the same opinion as Dr. Copeland. "I very much doubt," says he, "whether sick headache as often arises from disordered stomach as from irritated brain. I have repeatedly noticed an attack of sick-headache after indulging in stimulating food and drinks in the evening; but I have known headache prevented by keeping the head *cool* after an evening's debauch." He also quotes, and mentions cases which have come under his own observation, where the practice of keeping the head cool after a debauch was successfully resorted to, to prevent the headache, and adds, "If the pain of the head is caused by indigestion, what possible efficacy can there be in keeping the head cool?" and, further, he says, "I conceive that the increased action of the blood vessels during sleep, produced by the stimulating food and liquor, determines an unusual quantity of blood to the brain, irritates it, and this irritation of the brain produces the pain of the head, sickness and disorder of the stomach. I have noticed, moreover, that this disease most frequently effects those whose nervous systems are delicate and easily excited; and I have often known it produced by grief, or great mental anxiety; and it is seldom relieved without rest or long abstinence." The abstinence here mentioned by Dr. B. is, no doubt, a valuable auxiliary, but the *rest* is the chief remedy.

The father of the writer was always attacked by a severe fit of sick-headache, from any uncommon mental excitement or effort. This he attributed, erroneously, no doubt, to not taking his regular meals, which probably he had little appetite for, this having been destroyed by the cerebral action. The headache was invariable relieved by an hour's sound sleep, after which he took his meals with a relish; and, though a mere lad, I remember well he always *took his sleep first*. When the cerebral irritation was thus relieved, appetite and digestion returned.

There are few medical men of any experience who have not felt the great influence of anxiety and watchfulness in destroying the appetite and inducing headache. I have frequently, when harrassed by severe cases, fasted for twenty-four and sometimes forty-eight hours, without feeling the least inclination for food, until after the anxiety was in a measure relieved and I had slept. In stating this I believe I also state the experience of hundreds of medical men.

Men, of all professions involving much mental excitement and anxiety, have, undoubtedly, at some time experienced the influence of mental excitement upon the stomach and digestive organs. Some years since, the writer was intimate with a young lawyer of New England, of much mental activity and forensic eloquence, who was invariably attacked with diarrhoea after making an effort at the bar, which he attributed, correctly, no doubt, to the previous mental excitement. A young clergyman of my acquaintance, of much mental activity and eloquence, says that, when composing a sermon, he would scarcely

think of eating, but from the importunity of servants calling him to dinner, &c.—the mental excitement overcoming all inclination for food for the time being. The influence of fear in exciting the peristaltic action of the bowels is well known: why not other exciting and depressing passions? A most interesting case, illustrative of the intimate sympathy between the cerebral and digestive systems, was recently mentioned to me by a scientific friend, in whose accuracy I have the utmost confidence. He informed me that an acquaintance of his always became insane whenever his bowels became costive, and that the mental disturbance was always relieved *immediately* by the action of a thorough cathartic. M. Broussais says, “that he has often seen diarrhoea, colic and other disorders of the digestive organs caused by grief, fright, mental suffering; and that cerebral irritation will produce gastric irritation, and even a certain degree of inflammation of the stomach; and still asserts that “most encephalic phlegmasia are usually induced by gastric irritation.” Dr. Brigham, commenting on this, says: “I cannot but believe that this observation is incorrect, and that M. Broussais was led to make it in consequence of certain opinions he had formed respecting the frequency of gastric inflammation, and its influence in producing sympathetic disease—opinions which, I think, are not supported by facts. From the history which he has given of cases of supposed gastritis, or inflammation of the stomach, we learn that disorder of the stomach was often preceded by symptoms of disease of the head—such as slight aberration, melancholly, epilepsy, convulsions, &c. Some of his patients had studied severely, others had long been hypochondriacal, while others were homesick; and as his patients were mostly soldiers—many of them conscripts—it is not improbable that they had experienced severe moral suffering.”

But nothing shows more clearly the cerebral origin of a large majority of cases of dyspepsia than the means most successfully resorted to for its removal. Of all the ills incident to humanity, none has been more troublesome to the conscientious practitioner, from not having been well understood, or more taken advantage of by charlatans and impostors, for the same reason, than this.

These worthies, ever ready to come to the rescue, when “knowledge fails” or true science appears to halt, have here found a rich field for their labors, and one which has yielded and continues to yield them an abundant harvest. Homeopaths and hydropaths, botanics, and eclectics, metallic-tractors and magnetizers, *cum multis aliis*, have, in this unfortunate class of patients, found subjects best suited to their respective operations, and will continue to find them, until a treatment better suited to the mental and moral origin and nature of the disease comes to be more universally recognized by scientific medical men. It cannot be denied that, in the management of this disease, particularly in this country, science has been out-done, and has by no means been able to keep pace with professional quackery and *humbug*—a good illustration of the divine truth, that “the race is not to the swift, nor the battle to the strong, neither yet *bread* to the *wise*, nor yet *riches* to men of *understanding*, nor yet *favor* to men of *skill*; but

time and chance happeneth to them *all*." From the subjoined note, by Dr. Macnish, to the work of Dr. Brigham, it appears that the charlatanry so unscrupulously practiced on the subjects of this disease is not peculiar to America.* "The relief," says he, "which many dyspeptic people obtain by going to watering places, is a sufficient proof that their complaint is often intimately connected with the state of the brain. Oppressed at home with the cares of business, or rendered nervously irritable by dissipation, vapid pleasures, or want of occupation, (for this is as pernicious to the brain as too much employment,) a state of hypochondria, accompanied by impaired digestion, ensues.

"In this state they fly to such places as Bath, Leamington, or Cheltenham—place themselves in the hands of some fashionable empiric, who very gravely tell them to dring the waters, restrict themselves to a particular diet, and take some trifling medicine which he prescribes for them. They do this, coupling it with exercise in the open air, and with the light amusements which generally abound in such quarters. The consequence is, that the brain gets into a better state of action.

"If its morbid condition was produced by too much thinking, this is relieved; if by too little, this is obviated also; materials for employing it sufficiently existing in the change of scene, and in the prevailing gossip of the place. Restored to comparative health by this change of scene, the patient returns home enraptured with the virtues of the waters and the wonderful skill of the doctor under whom he was placed. Professional quackery and humbug are nowhere carried to such excess as in fashionable watering-places.† There they tell with powerful effect, seeing that they have to deal chiefly with those whose minds are previously weakened by hypochondriasis; *there* at present they seem to be indispensable for success, and will continue so till people get more enlightened."

That the extraordinary cure of many cases of chronic dyspepsia, set forth so vauntingly by the hydropaths and homeopaths of modern times, is very frequently the result of a powerful mental impression, appears evident, not only from the statements of the patients themselves, but from the reports drawn up by the practitioners. In the treatise on the water-cure by Dr. Gully‡—the only work having any pretensions to science which I have been able to procure—at page 102 *et. seq.*, he gives an interesting case of what he calls chronic "nervous"

* Perhaps one of the reasons for its superiority here may be found in the fact, that in no other country in the world has quackery and humbug been so completely systematized and reduced to a *science* as it has been by some of our most distinguished professors here.—*Vide* "Life of the "great" Barnum, and his lectures on the "*Philosophy of Humbug*," and the current works on "Matrimony," "Phrenology," "Mesmerism" and "Spiritualism" which emanate from the New York press and inundate the country.

† Except, we may add, in fashionable *water-cure establishments*, in the United States.

‡ *The Water-Cure in Chronic Disease*, by Jas. Manby Gully, M. D., L. R. C. S., etc., etc. New York, Wiley and Putnam, 1847.

dyspepsia, the fortunate result of which, it is evident from his own statement, was more owing to the powerful mental impression, than to the treatment of wet sheets, the sitz-bath, or the shower-bath.

Let it not be supposed that we are insensible, however, to the virtues of water as an *auxiliary* in the treatment of many chronic diseases—particularly of the brain and nervous system. The extensive and scientific use of this agent, in all our well-conducted lunatic asylums, by the eminent men at the head of these institutions, shows clearly that they, who are, to say the least, quite as able to judge of its virtues as the most eminent professors of the hydropathic school, are not insensible of its power as a therapeutical agent, though, unlike the latter, they are unwilling to give up all that the accumulated experience of many years has pointed out as useful, when properly employed, for the sake of a theory, and that too, a very narrow one. The case of Dr. Gully, alluded to above, was that of a lady of evidently a nervous, excitable temperament, who had for years suffered from what he terms “nervous and mucous” dyspepsia, the origin of which was traced to that confinement and mismanagement at school I have alluded to in a previous article. The treatment of this case (“by the most eminent practitioners,” of course) appears to have been very injudicious from the beginning; and the pernicious influence of the “drugging” is, perhaps, not overdrawn by Dr. Gully. One practitioner alone acknowledged he had run through the whole pharmacopœa, and was about to repeat the circle, when he was relieved by a homeopath, whose success appears to have been little better, and finally she came into the hands of Dr. Gully, at Malvern.

Space will not allow of our giving the case in detail; I will merely give the *denouement* in the Doctor’s own words. After subjecting her for six months to alternations of the sitz-bath and the packing-sheet, the shower-bath and the compress, the rubbings, copious water-drinkings, &c., he says: “Her dyspepsia—the accumulated dyspepsia of so many years of bad treatment—was, indeed, far from being cured; but it had gone infinitely further in that direction than hitherto, and all the patient’s sensations announced it. In the midst of the general organic excitement which the treatment had aroused, while all the organs were laboring to relieve themselves, a *strong mental agitation* occurred to her, and *nervous fever* announced itself in her unlucky frame. Whether a fever would have been the *crisis* of her prolonged and complicated complaints, as I often anticipated, or whether this particular one stood in that character, it is impossible to say, inasmuch as the *coincidence of a mental agitation leaves the possibility of its originating from that cause alone*. It was, however, the most violent and perilous I ever beheld. How it was treated is not germane to the history of the dyspepsia, but some idea of the *activity* of the treatment may be gathered from the fact that on *one day* she was folded in twenty-one successive wet sheets between 6 a. m. and 11 p. m.

It is well, perhaps, that the “mental agitation,” and the consequent “nervous fever,” were not accompanied by any great amount of physical disease, or organic change of structure, otherwise the twenty-one

wet sheets applied in such rapid succession, and the consequent fatigue and agitation of their application, might have accomplished something else, which even the drugging failed to do, and which (as the patient ultimately recovered, thanks to a good, sound constitution) the Doctor does not allude to. It is undoubtedly true, however that the hydropathic treatment of many cases of chronic dyspepsia, dependent on irritation of the brain and nervous system, as practiced by such men as Dr. Gully—coupled, as it is, by the hygeinic rules, so strictly enforced—has done much good. It is liable, however, to the serious objections peculiar to all systems where exclusiveness and routine hold absolute sway. It is, probably, a question whether the good which undoubtedly results in many cases of chronic dyspepsia from resorts to water-cure establishments arises so much from the specific treatment pursued, as from the mental relaxation, change of scene, and strict hygeinic rules adopted.

“The fact,” says Dr. Brigham, “that dyspepsia is frequently cured by permitting the overtaxed and tired brain to rest, or by change of the mental labor and excitement, is evidence that it is, primarily, a disease of the head, and not of the stomach. How often do physicians fail to afford relief by medicines in what are called ‘stomach affections,’ but which are readily cured by traveling or relaxation of accustomed studies! How often a change of the mental excitement affords relief! It seems as if certain portions of the brain having been unduly excited, become diseased, and were benefited by strong excitement of other portions of the same organ. How often are stomach affections cured by inert medicines, aided by the imagination, confidence, hope, &c.! In a note appended to this passage, Dr. Macnish says that he once cured a lady, who fancied herself seriously ill of a stomach complaint, by administering three dozen of *bread pills*. I once treated successfully a hysterical young lady, who fancied herself seriously ill, and quite unable to move without assistance, and whose case I shall probably refer to in treating of that disease, by the administration of twenty-five drops of colored *water* three times a day, for a short time.

Time will not allow of my entering more fully into the consideration of these cerebral and gastric sympathies at present. I shall probably recur to them again, in treating of hypochondria and other kindred affections, in a future number.

EDITORIAL AND BOOK NOTICES.

TRANSACTIONS OF THE AMERICAN MEDICAL ASSOCIATION. Volume 8, for 1855.

We have upon our table, the above named volume of 763 pages, printed in clear type, on substantial white paper, and bound in cloth in a cheap, but rather neat style. In outward appearance it is a cheap, but decent looking book. Nothing more than this can be said in its favor; and the question suggests itself, whether, in the present condition of the treasury, a volume cannot be afforded which will present a more finished and substantial appearance, and which will remain in our libraries,—it may be, to pass down to posterity a record of the progress of medical science, with less danger of falling asunder by the touch of time and use? It may be objected that heavier binding would subject members to more expense in transportation; and that each member can have the work re-bound in such style as he may choose. To this it may be stated that, to all places where binding can readily be done, the Express has found its way, and that by this mode of conveyance the expense would not be greater; while those who receive their copies by mail are so situated with reference to a binder that they would gladly pay the additional trifle for the sake of having the volume reach them in a substantial form. Though the outward appearance of a book has nothing to do with its internal merits, it may have something to do with men's appreciation of those merits. We confess we should like to see still further improvement in the external getting up of the Transactions of the great American Medical Association.

As already stated, the volume contains 763 pages, and compares well, in size, with its predecessors, being exceeded we think, in this respect by only one—though in a notice as a sort of preface, it is stated by the publishing committee that they were reluctantly obliged to omit elaborate reports of Drs. L. H. Anderson and E. D. Fenner, inasmuch as they were presented to the committee without the previous action of the Association.

We have in the volume first in order the "Minutes of the eighth annual meeting of the Association," occupying 53 pages, the more important parts of which have already been given in our journal. Next is a brief report of the "Committee of Publication," from which we learn that there were but eleven full sets of the published transactions

of the Association on hand at the time the report was made, and that these, from their increasing value would probably be disposed of in a short time. Then follows the "Report of the Treasurer," from which we learn that, at the close of his term \$1,115.26 was in the treasury, showing a sound condition of the Association's finances. Next we have the "Address of the President, Dr. C. A. Pope," occupying five pages, the outlines of which our readers have been favored with.

The other papers in order are, "A report on the Diseases of Missouri and Iowa," by Thos. Reyborn, M. D., of St. Louis, occupying 241 pages, or nearly one-third of the volume. Next comes the "Report of the Committee on the Hygrometrical state of the Atmosphere in various localities, and its influence on health." by Sanford B. Hunt, M. D., of Buffalo, occupying 20 pages. Next we have a paper on "Deformities after Fractures," by Frank Hastings Hamilton, M. D., of Buffalo. This occupies ninety-four pages, and seems to be gotten up in a careful and elaborate manner. Commencing with fractures of the Ossa Nasi, he has proceeded downward; and at the close of his report he has not gone beyond fractures of the Clavicle. We presume the report will be continued and extended to other bones. The next paper is a "Report upon the Diet of the Sick," occupying forty-seven pages; by Chas. Hooker, M. D., of New Haven, Conn. Then follows a "Report on Scrofula," of forty-three pages; by Wm. H. Byford, M. D. of Evansville, Indiana. We have then a "Report of the Committee on the Means of Preserving Milk, and of the Influence of Pregnancy and Menstruation on the Composition and Nutritive Qualities of that Fluid; by N. S. Davis, M. D., of Chicago. This is a partial report confined to the means of preserving milk, and occupies eight pages. The next paper is a "Report of the Committee on Dysentery," occupying twenty-four pages, drawn up by J. H. Beech, M. D., of Coldwater, Michigan, and signed by H. Taylor, M. D., of Mt. Clemens, Mich. as chairman, and by Dr. Beech. A paper on the "Effects of Alcoholic Liquors in health and disease;" by R. D. Mussey, M. D., comes next, occupying twenty pages. A very brief sketch of a Caustic Pulveriser, with an illustrative cut, by R. H. Thomas, M. D., of Maryland, follows, when we have what should be the great paper of the volume the "Prize Essay." This is entitled "Statistics of Placenta Prævia." It occupies 122 pages, and is by James D. Trask, M. D., of White Plains, New York. We then have the "Plan of Organization of the American Medical Association;" "The reception of the Association at Independence Hall, Philadelphia, May 2d, 1855, with the addresses of the chairman of the Commit-

tee of Arrangements, Dr. Isaac Hays—and Mayor Conrad in reply.

A list of officers and permanent members, and an index closes the volume.

We have thus given a brief view of the contents of the volume before us; a volume creditable to the profession of the country, and especially so to those immediately connected in its production.

It is our intention to examine in separate articles several of the papers we have here merely named, when we shall point out more particularly their characteristics.

As the next meeting of this body is to be in our midst, we presume our readers will be gratified by our occupying considerable space in giving the substance of the more interesting portion of these transactions.

A. B. P.

ELEMENTS OF MEDICINE; A COMPARATIVE VIEW OF PATHOLOGY AND THERAPEUTICS; or the HISTORY AND TREATMENT OF DISEASES. By Samuel Henry Dickson, M. D., LL. D., Prof. of the Institutes and Practice of Physic in the Medical College of South Carolina. Blanchard & Lea, Publishers, Philadelphia, 1855.

This volume, while as its title denotes; it is a compendious view, is also a comprehensive system of practice, perspicuously and pleasantly written, and admirably suited to engage the interest, and instruct the reader. It may be a question with some whether such a work is at the present time called for. The numerous systems of practice, which of late years have issued from the press, would seem to render still another, a supererogatory work. The admonition of Solomon “of making many books there is no end” seems especially appropriate here; and yet we opine that the perusal of this book of Dr. D. will not by many be regarded as a weariness of the flesh. The book is after all new only in its present form; its contents, to a considerable extent, have been given to the public, years ago in the form of manual text books, and volumes upon medical subjects in general.

The volume now produced, the author assures us “is the result of a careful collation of what has been esteemed most valuable in both, with such matter as continued study and enlarged experience have enabled me to add.” Dr. D. arranges his book in two parts.

PART 1 treats of General Pathology, of which in five sections he discourses, under the following heads, viz: Nature, Etiology, Seats, Phenomena and Tendency of Diseases.

PART 2 treats of Pathology and Therapeutics. Dr. D. prefers and follows the physiological nosology of Good, and in the six sections of the second part of his book he treats of diseases under the following order and arrangement :

- 1st. Diseases of the Circulating System.
- 2d. Diseases of the Digestive System.
- 3d. Diseases of the Respiratory System.
- 4th. Diseases of the Sensorial System.
- 5th. Diseases of the Motory System.
- 6th. Diseases of the Excernent System.

In the main we think the views of Dr. Dickson, as contained in part first, are those of the majority of the profession ; such as long experience and well established facts tend to confirm. But this, we think, does not apply to his views upon Etiology and nature of diseases. Upon the subject of contagion he is, if not peculiar, at least at variance with the majority of the best medical minds throughout the world.

In regard to the question of contagion, in its application to particular diseases, as discoursed upon in part second, he differs widely from the profession generally, in arranging under this head, Asiatic Cholera and Yellow Fever, not to mention the Plague of Egypt, of which we, in this country, can only know through the descriptions and opinions of writers, and are therefore not so well able to judge of it.

With a few minor exceptions like the above, we believe the views of Dr. Dickson, as contained in this book, are accordant with those of leading minds in the profession ; and although this exception may render the book less worthy of commendation, as an elementary work for the student, yet for the more matured, it may even be an advantage, by stimulating and aiding them to a more critical and thorough investigation of the whole subject of contagion.

In the arrangement and classification of diseases which he adopts, in his description and treatment of particular diseases, he is worthy of all commendation for clearness and comprehensiveness, and in other particulars which deeply interest and strongly impress the reader.

We like the work and only regret not having been able to give it an earlier notice. We recommend it to our readers. s.

A CONSPECTUS OF THE PHARMACOPEAS OF THE LONDON, EDINBURG, AND DUBLIN COLLEGES OF PHYSICIANS; AND OF THE U. S. PHARMACOPEA; BEING A PRACTICAL COMPENDIUM OF MATERIA MEDICA AND PHARMACY. By Anthony Todd Thomson, M. D., F. L. S., &c., &c. Seventh American edition, much enlarged and improved. Edited by Chas. A. Lee, M. D. From the 13th English edition. N. Y., Samuel S. and Wm. Wood, No. 261 Pearl-st., 1855.

We have received the work with the above title from the publishers, and we can safely say that it ought to be on the table of every practitioner.

When we commenced the practice of medicine, we procured a copy of the 5th edition; and although, with Pareira's great work on *Materia Medica* on our shelves, Thomson's *Conspectus* ever lay before us. The present edition numbers 322 pages of closely printed matter, and contains the names of all known remedies, their *composition*, *properties*, *operation* and *use*; also their *incompatibilities* and *dose*. Fifty-two pages have been devoted to the science of Toxicology; nearly four pages to urinary calculi, showing their chemical composition; nearly thirty pages to prescriptions and the art of prescribing, and several pages to dietetic preparations for the sick. The latter third of the book, embracing Toxicology, and what follows, is from the *pen* of the American editor, and also much of the body of the book, than whom no one was more fitting to the task than Dr. Lee. We cheerfully recommend it to the profession. Like all work from the Woods' press it is convenient and durable.

W. B.

We have received upon our table the annual report of the city Inspector, of the city of New York, for the year ending December 31st, 1854. Document No. 2. Board of Councilmen, Jan. 1, 1855. New York.

The provisions of an ordinance, organizing the Department of the Municipal Government of the city of New York, renders it incumbent on the City Inspector to transmit to the Common Council an annual report of the affairs and transactions relative to his office, comprising a full statement of the extent of the mortality during the past year; with the sexes, ages, color, nativities and diseases of the deceased, as obtained from the certificates of death. The whole occupies 228 pages, the greater share of which is taken up by the various tables.

As a matter of interest, we append the *General Summary*, which gives a concise view of the whole.

GENERAL SUMMARY.

Total number of deaths reported for interment during 1854.....		28,568
Deduct the number of <i>Still-born</i>	1,615	
“ “ of <i>Premature Births</i>	435	
	2,050	
“ “ of <i>Malformation (various)</i>	147	
“ “ of <i>Old age</i>	180	
	2,377	
“ “ of <i>other causes (sudden)</i>	123	
	2,500	
Leaves the number of deaths occurring from disease and casualties.....		26,068
Deduction made of the number of deaths from various casualties, suicides, &c., noted as injuries, as per table of “ <i>External causes</i> ,” amounting in all to.....		743
Leaves remainder to represent the total number of deaths from disease alone, amounting to.....		25,325
The divisions of the total number, appear thus :		
The total number of whites reported.....	27,867	
“ “ “ blacks “	701	
	28,568	
The number of male adults is.....	5,746	
“ “ “ children is.....	9,519	
Total males.....	15,265	
The number of female adults is.....	4,936	
“ “ “ children is.....	8,367	
Total females.....	13,303	
The total number of adults is.....	10,682	
“ “ “ children is.....	17,886	
Grand Total.....	28,568	

The report concludes by stating that while the mortuary statistics of New York city are about as perfect as it is possible to have them. Yet it is almost useless to enter into any disquisition upon the very interesting subjects of a comparison of the natal and mortal statistics furnished ; for while the former are evidently erroneous and imperfect, and hence of very little utility in this view, the latter are, perhaps, the truest obtained anywhere.

The returns of marriages are nearly as imperfect as those of births ; and although an amended law has been in operation for over a year, yet it fails to make them perfect.

At the late meeting of the American Medical Association, a committee, consisting of one member from each State of the Union, was appointed to report at the meeting in May next, "upon a uniform system of registration of marriages, births and deaths." We are in hopes, therefore, that some plan may be adopted to be presented to the legislatures of the several States, whereby correct information may be obtained on these interesting topics.

In a legal point of view, the importance of a faithful registry is of vital necessity.

W. B.

INTRODUCTORY LECTURES.—We have received of late, several of these pamphlets; and although they are generally written to explain to the student the plan of education about to be pursued by their respective schools, and the urgent necessity of the pupils giving their whole time and attention to their studies; yet many of them contain facts of general professional interest.

Our attention has been directed to this subject by the perusal of the introductory lecture given by the new Professor of Surgery, Henry H. Smith, M. D., in the University of Pennsylvania, before the class of 1855-6.

The subject is "A Professional visit to London and Paris." Prof. Smith, after an absence of sixteen years, re-visited the London and Parisian schools of medicine during the past summer. In a brief manner he describes the various institutions, the teachers who are attached to them, and the facilities whereby a sound medical education can be readily attained. He then proceeds to compare the relative merits of the foreign schools to those of our own. To sum the whole, he says: "I cannot but express the conviction, as based upon individual experience that a sound *medical education* is more certainly attainable in our own institutions."

The above sentence expresses much; "for while our Parisian co-laborers are so intensely devoted to mere scientific investigation as causes the prescriber to forget the cure of his patient in his anxiety to study the pathology of the complaint, consequently there is frequently more interest apparent on the part of their students in noticing the post mortem appearances, than there is in observing the restoration to health; with the English as with ourselves, the love of science does not show itself in the same way; and apothecaries are more frequently thought of rather as means of overcoming the defects

of the healing art, than as exhibiting the diagnostic accuracy of the medical attendants."

When we read such expressed opinions as the above as touching the merits of our Atlantic schools of medicine with those of European celebrity, we cannot but draw the conclusion that our own schools, situated in the interior of this vast and extensive Union, are equally capable in the fulfillment of all things necessary to a complete medical education. And especially are we compelled to believe so, when we see the results verified in the same field of practice. In the transactions of the N. H. State Medical Society, for 1855, we find the following opinion expressed in the "report of the Delegates to attend the examination of Dartmouth College, Nov., 1854:"

"We are of opinion that the Medical Department of Dartmouth College is fully equal in all respects to any school in the United States similarly located, and that any student can attend at least two courses of lectures at this school with greater profit than any of the schools in the large cities.


Our school of medicine, located as it is in a comparatively small and most pleasant and beautiful village, devoted entirely to education, is in no ways liable to the many unhappy influences to which similar institutions are subject in our large cities. This we deem an important consideration, and should have an influence on our minds when we advise *our* students where to attend medical lectures."

June 5, 1855.

The Medical Department of the University of Michigan, fixed by the liberality of the State, upon a broad and firm basis, richly supplied with all things necessary for ample illustration of the various departments of medical science, with a full and thoroughly qualified Faculty to teach all things relative to a complete Medical education. yet requires the fostering care and attention of the profession of our own State. We had the pleasure of visiting the Medical Department a short time since, when we were highly gratified at the appearance made by the class, (consisting of 146 members,) and their close attention to the lectures of the Professors.

It is a well known fact, that there are those who would gladly see the Medical Department of the University fail, and even hope for the event; but while the Profession come forward and manfully support it, not even legislative or other ultra outside influence can jar its foundations.

As Dartmouth Medical College is to the profession of New Hampshire, so should be the Medical Department of the University of Michigan, to that of Michigan; when every teacher shall advise his pupil to patronize the institutions of his own State. W. B.

 We respectfully call the attention of the Profession in Michigan to the following circular of Dr. Beech, of Coldwater:

C I R C U L A R .

COLDWATER, BRANCH COUNTY, MICH., }
September 13th, 1855. }

The Committee of the American Medical Association "On Medical Topography, Epidemic Diseases and most successful treatment thereof," address you this Circular in their endeavor to get together materials for a Medical History of the country. Please communicate to the address of the undersigned, any and all information which may enable him to make a report, in which due credit will be given to each collaborator, and his name mentioned in connection with facts and histories furnished by him.

Please mention everything that has been printed or published about the medical history of your district, any topographical account or histories of particular epidemics, and say how far your own observation enables you to vouch for facts therein presented.


Geological and physical charts are very desirable, as well as descriptions of peculiar features of country or city.

Please mention *all epidemics* of which you may have any knowledge, being particular to assign limits of time and space as exactly as possible, giving, in connexion with each disease, the peculiar features of the country, city, ward or street where it prevailed, with slope of rocks, character of soil, meteorological records and observations, altitude above the ocean or adjacent bodies of water, character of the water, artificial changes as by cultivation, cutting down or planting of trees, sewerage, drainage, &c., &c.

Any supposed cause of disease, peculiar symptoms, post-mortem appearances, prevention, therapeutical influences, and all details of age, sex, nativity, occupation, &c., of individuals, and of the duration and severity of diseases at different periods, proportion of mortality, &c., &c., should be given.


An early answer to this communication is desired.

J. H. BEECH, M. D., Com. for Mich.

 We are requested to insert the following notice, and we heartily request the profession in South-west Michigan to take note of it, and act, each one, as personally interested in the matter :

The semi-annual meeting of the South-western-Michigan Medical Association will be held at Niles on the first Tuesday in February. We hope there will be a goodly number present in order that the profession in this part of the State may be properly represented at the next meeting of the American Medical Association.

B. P. WELLS, Corresponding Sec'y.


 We owe our readers an apology for the lack of original and editorial matter in the present number; but we hope you will bear with us when we state, that the senior editors, Drs. Pitcher and Palmer, have both been confined to bed by illness: Dr. Pitcher from a severe cold, threatening inflammation of the lungs; and Dr. Palmer of Acute Cystitis. We are happy to state that Dr. Pitcher is convalescing rapidly, and that Dr. Palmer was no worse per last accounts.

B. & C.

EXCHANGES.—Our exchanges would confer a favor in changing the address of the *Peninsular Journal of Medicine* from "Ann Arbor, Mich.," to that of "Detroit, Mich.," as by re-mailing, many of them are lost to us.

The announcement was made in the Oct. number, but few have, as yet, made any change.

W. B.

 We are very sorry of being under the necessity of calling the attention of some of the subscribers of the *Journal* to the fact, that they are yet in arrears. While many answered promptly to the bills we sent out in the November No., yet many have overlooked the matter, and doubtless forgotten but that *they also* had paid.

It is our earnest endeavor to make the *Peninsular Journal of Medicine, the Journal of the West*, and all we ask of our patrons is *prompt payment*; as much original matter as they can find time to send us, and the name of every physician and surgeon in the State upon our subscription book.

ED'S.

THE PENINSULAR
JOURNAL OF MEDICINE
AND THE COLLATERAL SCIENCES.

VOL. III.

FEBRUARY, 1856.

NO. VIII.

ORIGINAL COMMUNICATIONS.

ARTICLE I.

*Libel Suit in the Wayne Co. Circuit Court—Hon. S. T. Douglass,
Presiding.*

BENJAMIN R. EGGERMAN }
vs. }
HERMAN KIEFFER. }

Counsel for plaintiff, H. D. Terry and William Gray. Counsel for defendant, Lothrop & Duffield.

This was an action of slander, tried at the last November Term of the Circuit Court. Both parties practice as physicians in the city of Detroit. The plaintiff, who passes under the name of Dr. Rudolph, was charged, by the defendant, with being the cause of the death of a German woman named Hoek. This was the alleged slander.

It appeared, that Mrs. Hoek was confined in childbirth, attended only by a midwife; that about an hour after the delivery of the child, Dr. Rudolph was called to see Mrs. Hoek, and found that the placenta was not removed. He left the patient, without removing the placenta, and after some time again called in. He again went out. About 2 P. M., the defendant was called in, and removed the placenta. The patient soon after died.

There were some questions of law made in the case, but none of any general interest.

The defendant insisted, that the death of the patient was caused by the neglect of Dr. Rudolph to remove the placenta. This was the great question in the case. As will be seen, the witnesses who were present at the sickness of Mrs. Hoek, differed widely in their statements of the condition of the patient, and also as to the hour of the delivery.

But the subject of the highest interest was the medical testimony. Several of our most eminent physicians were called to the stand, and their evidence was in the highest degree learned and interesting. It is to be regretted that it cannot be given in such shape as to do justice to the learned experts. But the only means which we possess are the hasty and condensed notes of counsel, taken at the trial; yet it is believed that these will give a correct idea of the evidence.

STATEMENT OF PLAINTIFF.

Plaintiff was sent for to go to Hoek's. Found that Mrs. Hoek had been delivered about an hour, under care of a midwife. The after-birth had not been delivered. Found patient well, in good spirits, without any after-pains, no flooding, uterus inert; that patient told him that she was subject to this; examined and found the placenta; prescribed tincture of ergot; went away, to be absent two hours. Returned in about two hours; no flooding; found her eating broth; went away, to be absent fifteen minutes; and returned, and found her dead and floating in her blood. That defendant came in, without being sent for, and took away placenta by force, and woman died immediately, from hemorrhage.

TESTIMONY.

Dr. J. B. Scovell. Knows Dr. Rudolph Eggerman as a physician and surgeon in active practice in this city for last eight or nine years. Never met him in consultation; only knows he has been in practice; do n't know that he is a bred physician.

Ludwig Hoek sworn (testimony received through an interpreter). Was husband of Barbara Hoek. Can't say what day his wife died. Was on the Pontiac Railroad, near Pontiac, when she died. Heard of her death next morning at 8 o'clock, and came in at 2¼ P. M. on the same day. Saw defendant in Brush street, a little below Alter-auge's house, north side of Jefferson Avenue, between Avenue and Larned street. First thing Dr. Kieffer (defendant) said was, he asked

him if he was Hoek. I told him I was. He (defendant) then said to him, "Dr. Rudolph has killed your wife. Sue him; you can send him five years to the State Prison, and make him pay you \$5000 damage for killing your wife." I was in a hurry to get home, and did not speak to defendant further. Found my wife dead when I got home.

Cross-examined. Two men were with me. Did not first speak to Dr. Kieffer. Did not speak to him before he spoke to me. Have not told any one that I spoke to Kieffer. Had a conversation with Jacob Ebelhardt, about time of trial last September. Did not say in presence of Ebelhardt, that he (witness) first addressed the defendant, when they spoke in Brush street. Knows Hetty. Had a conversation with Dr. Klein next morning after my return from Pontiac. Did not know whether he told Dr. Klein the next morning, that Dr. Kieffer had killed his wife. I told Dr. Klein, that defendant took away the after-birth, and pulled away the *ovaries with it*. My sister-in-law told me, that Dr. Kieffer, in pulling away the after-birth, took away ovaries with it.

Q. Did not you tell Dr. Klein, in the communication referred to, that the plaintiff told you the defendant, in taking away the placenta, pulled away the ovaries with it?

Objected to. Sustained, and excepted to.

Antoine Hoek sworn. Brother of Ludwig Hoek. Was with Ludwig. Defendant asked him first if he was Ludwig Hoek. Defendant said, "Dr. Rudolph has killed your wife; (they spoke in German;) Ludwig go sue him for five years in State Prison and \$5000 damages."

Gertrude Webber sworn. Am Hoek's sister. Was present in Mrs. Hoek's last sickness. Dr. Rudolph was attending physician.

Plaintiff rests.

Anna Keple. I am sister-in-law of the defendant, and lived with him at the time of the death of Mrs. Hoek. Were persons several times for defendant to go and see Mrs. Hoek, some time in the forenoon, about nine or ten o'clock,—three or four times before dinner. He was not at home; returned between one and two o'clock. We informed defendant, when he came home, that he had been sent for to see Mrs. Hoek. He did not go on that information, but only went when next sent for.

Saw something brought to office, which sister or sister-in-law of Hoek called after-birth. Brought it there in the evening, about five or six o'clock; and next day, in the afternoon, same woman took it without consent.

Cross-examined. Heard some persons enquire for defendant to go and see Mrs. Hoek, but did not know who it was. Did not know Hoek's family. Did not see any one come after defendant in the afternoon. He came up stairs, and said he must go. After-birth was put in a bowl on a table in the office, and remained there. Could not say whether any one examined it, but nothing happened to it. Was in the same condition when it went away, as when it came. It looked the same when it was taken away. Do not know that a piece was cut off. Did not hear defendant say that he cut off a piece, nor that it was diseased. Is not married.

Louisa Ege. Knows Mrs. Hoek, and remembers when she was confined. Lives near her. Saw her about half-past nine in the morning; child was then born. Was not there when Dr. Rudolph was there first. Remained there about eighth of an hour, when first went. Was there about a quarter of an hour afterwards, and remained about a quarter of an hour. Was in and out; and was there about five or six times. When I first went there, about half-past nine, woman was flowing a good deal; woman was flowing all the morning. Mrs. Hoek complained of weakness, and of burning in the lower part of her stomach; she was very weak. Was flowing about half-past eleven in the morning, the last time I was there during the day. Heard Mrs. Hoek ask who was the best doctor, and she said Dr. Kieffer. Defendant was sent for. She was very weak, and could hardly say it, but asked that defendant should be sent for. Clothes showed much blood; did not see whether blood came through the bed.

Cross-examined. Am married, and have one child. Child had been born about half an hour when I went there; child was on the bed, behind the mother. Do n't know at what time I saw the sheet, but think it was third time, about eleven o'clock. Sheet was under her, and we took it away; and do n't know whether any other was put under her. Saw that the sheet was bloody, but did not notice color; there was a good deal of blood; did not look so particular. Mrs. Graff was midwife, and that was her business. Hoek's sister went for defendant. The first time I was there, Mrs. Hoek asked me who was the best physician. Do n't know that any other doctor had been there. Was not there when they sent for Doctor Rudolph. Midwife told me that Mrs. Hoek had flowed much. Midwife said everything was full of blood. This was the language of midwife. Saw other things filled with blood; everything under her was full of blood.

Can't say exactly whether the sheet was taken away second or third

time. Did not take all the bloody clothes away. Never was present at childbirth of any other woman. I gave her some drops; call them Hoffman's drops; I get them from Doctor Jahr. Gave them second time; I gave them because she was very weak. Did not feel her pulse. Have tasted Hoffman's drops; burn the mouth some. Mrs. Graff told me to give them to her. She said she had used two bottles. I went home and got one, and gave her six or seven drops on sugar. Do not know whether anything had been given her before. Could not tell how the drops affected her. She was weak, and did not say much. When I was in second time, I recommended defendant; also the first time. It was said defendant was not at home. Did not advise to send for defendant, and no one else.

Wilhelmina Weitz. Knew Mrs. Hoek. Saw her first time, on day she died, after ten o'clock. Child was born when I went there. Mrs. Hoek's sister, midwife, and two neighbors (women) were there. Was not there when Doctor Rudolph first came. Saw plaintiff there once only. Spoke with him. Was there from after ten till Mrs. Hoek died. Doctor Rudolph had been there, and went away before I went in. I was there before eleven o'clock. Mrs. Hoek was very weak when I went there; she had flowing that forenoon. It was before noon that Doctor Rudolph was there, when I was there. Woman was flowing before I saw Doctor Rudolph; she was flowing when I first went there. I saw Mrs. Ege there when Mrs. Hoek was faint; Mrs. Hoek was very low, and had signs of death about her, when Doctor Rudolph was there. I asked Doctor Rudolph how Mrs. Hoek was, and he said nothing, but shrugged his shoulders. Had occasion to reach under the bed to get something, and put my hand into a puddle on the floor, under the bed. Was no clock in the room, and can't say when this was, but it was before Dr. Kieffer came there; he came there after dinner. Mrs. Hoek told me that she had lost a great deal of blood. Thinks Dr. Rudolph said something about giving her some medicine, but is not sure. Was there when defendant came there after dinner. She was weak and looked bad when defendant came there; her eyes were set. She asked for Dr. Kieffer. Am not sure whether she said anything when defendant spoke to her. Dr. Kieffer came in, and asked me how Mrs. Hoek was. I said, Very bad. Dr. Kieffer spoke to midwife, and asked if any doctor had been there. She answered, Yes; Dr. Rudolph. Dr. Kieffer asked if Dr. Rudolph had attended to everything. She said, Yes; everything is in order. She said it had been taken away. Dr. Kieffer said, If you have got another doctor, I can do nothing; and turned around to go away. I

felt angry, and told him not to leave poor folks, to go and attend rich ones;—stay, and attend to this woman. Dr. Kieffer went to examine Mrs. Hoek. Dr. Kieffer then turned to midwife, and said, How can you say everything is in order? The whole afterbirth is yet in the woman, except one little piece. The defendant then took away the after-birth. The woman said she felt a little lighter after this; otherwise, she felt as she did before. Dr. Kieffer told them to give her some wine soup. I prepared the soup, the woman saying she was hungry. When I came, to give her the soup, she was dead. Did not hear Dr. Kieffer say anything about sending back any medicine. Defendant said, Woman lays very low: you have Dr. Rudolph, and if anything do n't go right, I do n't want blame.

Had a talk with plaintiff about this a few days after, same week the woman died, at my own house, near back door. Plaintiff said something about after-birth.

Cross-examined. Am thirty-one years old; have two children. Lived close by Hoek's house, on Fort street, east of Market. Has lived in Windsor, Canada, fourteen weeks. Husband was a painter here; keeps boarding-house in Windsor. Had known the defendant about five years; defendant was my family physician. Knew Dr. Rudolph. Can't say how soon Dr. Rudolph came, but it was before noon; was not twelve o'clock. Was only a little after ten when I went there. Do n't know when the child was born; he was dressed. I looked after woman. Eyes were half shut when I went in; once in a while, she would wink them. Was in that condition all the time. Was difficult for her to speak. Was out of the room at times; and once went home, and put my own child in the cradle. Was only out just long enough for this. With this exception, was there all the time. Had a small girl to work for me; had three boarders. Got no dinner that day. Was at home when boarders took dinner. Do n't know who my boarders were; only boarded them a few days. On second day, midwife and I saw Dr. Kieffer. Dr. Kieffer did not say he wanted her as a witness to walk Dr. Rudolph to State Prison. Defendant did not tell me to preserve after-birth, but told midwife. Do n't know of any change of bedclothes. Woman looked very pale, features sharp, and eyes sunk in, when Dr. Rudolph was there. Did not take any soup before Dr. Kieffer came there. Was looking for cloth under the bed, when I put my hand in the puddle. All I know about Mrs. Hoek's flowing was what Mrs. Hoek told me, and what I found under the bed. I did not go for defendant, nor did I send for him: it was said generally, Send for Dr. Kieffer! Dr. Rudolph

left orders to give her something which was white like water. Do n't know what ergot is. All I saw of Dr. Kieffer, was that he felt her pulse; soon after, the woman died, and I went away. She died within half an hour after the after-birth was taken away. She breathed very short; after that, she breathed longer. She did not say anything when the after-birth was taken away. Do n't remember who brought my child over. Do n't know, for sure, whether woman spoke to Dr. Kieffer when he first came in. Saw Dr. Kieffer wash his hands; and he told me to prepare some wine soup, and then went away. Saw him put his coat on. Dr. Kieffer said there was a small piece of after-birth missing. He gave directions to have after-birth sent, but did not give me directions. Mrs. Hoek was not dead when Dr. Kieffer went away. Mrs. Hoek said she was hungry, after the after-birth was taken away. She was dying when I brought the soup; she drew one breath after I came back.

Dr. Zina Pitcher. Had a large obstetric practice. Has been my rule not to allow any time to elapse after expulsion of the foetus, before proceeding to the removal of placenta. The placenta is a soft, vascular, spongy substance; after the birth of the child, it has no further office to perform, and, in a perfectly normal condition of the uterus, is immediately cast off, after the birth of the child, by the contractions of that organ; and cases occur where, if the membranes are not ruptured artificially, the foetus and placenta are expelled at the same time. The reason of this prompt action is this: there may be, as in the case of Mrs. Hoek, a morbid adhesion of the placenta, or an hour-glass contraction may occur, or a partial inversion of the womb, from a shortened cord,—all of which difficulties are the easier removed, the earlier they are known; a partial detachment of the placenta is followed by flooding,—this will occasion faintness, exhaustion, cold perspiration, imperfect closure of the eyelids, and apparent upturning of the eyes. The first duty of the physician, if he comes in within two or three hours after the delivery of the child, should be to ascertain if the placenta has been expelled; if not, he should use external pressure and gentle traction of the cord; these failing, he should introduce his hand into the uterine cavity;—by which means, he can alone ascertain the condition of his patient. If the placenta is adherent, he must cleave it off: this duty would be the more imperative, if there was flowing. He would be criminally reprehensible for leaving his patient unrelieved. If inertia co-existed with adhesion, the measures just named should still be adopted: at the same time, remedies should be administered, for the purpose of restoring tonic contractions of the womb. If de-

tached, the retention is not a matter of so much consequence, in case of inertia; but if partially attached, the duty of removing is still imperative, because the getting up of the uterine action would increase the difficulty of the manual effort, to be made for the removal of the placenta. Should say that death was the result of antecedent causes, unless it were in proof that a very rapid flowing followed. If death was within a few minutes, *a fortiori* death from antedecedent causes. The ovaria are exterior to the uterus, and the duct, or tube by which the ovum reaches the uterine cavity, is exceedingly minute.

[Offers to show that the ovaria could not be drawn away with placenta. Rejected, overruled, and exceptions taken.]

Cross-examined. If I should be called in, from one to two hours after birth of child, no flowing, pulse good, uterus relaxed, I would take away the placenta at once. Never lost a patient by this course. Placenta, if detached, may close the os uteri, and conceal a dangerous flooding. The case of inertia, supposed by counsel, is at war with the idea of a full pulse, good spirits, and a cheerful countenance. Inertia may be confounded with faintness, and a peculiar state of nervous exhaustion which follows the termination of labor in some females, where the uterus has contracted naturally. Never have seen a case of calcareous placenta: it is merely possible, as this condition requires considerable time for its development. The placenta would be torn by a force that would not injure the uterus. I should not expect flowing, from taking it away. After getting the history of the patient, I should act on my own judgment, having no regard to the dictum of any authority, unless enforced by reasons which overruled my own opinions.

Re-examined. The natural flowing is but a few ounces; would stain the linen of a woman considerably, but not saturate a sheet.

Dr. Peter Klein. Am a physician. Know Hoek. He called on me about the time of the death of his wife.

Q. Did not Hoek tell you, in the conversation you had with him, that Dr. Rudolph had told him that Dr. Kieffer had killed his wife?

Objected to. Ruled out, and excepted to.

Have had considerable practice in obstetrics. Under all circumstances, it is the duty of the physician to ascertain whether the placenta has been removed or not; and if not removed, to proceed at once to remove it by outward friction. If no symptoms of flowing, may institute frictions and arouse action of the nature. If flowing has taken place, it is his duty to ascertain if the placenta is adherent, and at once to remove it. If flowing has taken place, there is weakness, &c., then placenta should be removed. If placenta is partially

adherent, will be likely to increase flowing; severe flowing produces general prostration, sharpness of features, closing of the eyes, cold sweats, &c. Improper practice to leave the placenta till afternoon; should attribute death, in such case, to antecedent cause.

Jacob Ebelhardt. Knows Hoek. Had a conversation with him some time last September, near City Hall Market. Hoek said he first spoke to Dr. Kieffer.

Hoek re-called. Did not say that I asked defendant if he was Dr Kieffer.

Ebelhardt resumed. Hoek told me that he spoke to defendant, and asked him if he was Dr. Kieffer.

Christopher Hetty. Hoek said he first spoke to Dr. Kieffer; that he asked him if he was Dr. Kieffer. Said that he asked the defendant about the matter of killing his wife.

Dr. Geisbusch. [Offers to prove that plaintiff told him that the defendant, in taking away the placenta, drew away the ovaria with it. Objected to, and overruled.]

Am a physician of nearly seven years' practice in America and nine years' in Germany. Saw the placenta; it was at Hoek's house, on the evening of the third day. Made an examination of it, and found a small piece of it gone; it had been a piece near the mouth of the uterus that was missing. There was a small piece wanting when it was last taken away. The after-birth was taken away according to the laws of art; it could only be removed slowly and carefully. It is possible that some part of the placenta may be attached so fast that it will tear before it will loosen. A piece may be taken away from the lower part, but then you can only take away a piece at a time: if you would remove the whole of it, you must begin at the upper part.

Cross-examined. Placenta had not decomposed. Did not examine Mrs. Hoek. Never takes long to remove placenta,—only one or two minutes. Have had cases where the womb contracted, and could not get at the womb for a quarter of an hour. Never, under any circumstances, wait more than two hours to remove the placenta. If I was called after two hours, would not wait at all, but would perform the operation. If I was there, immediately would try to make pains; otherwise, perform the operation.

Dr. Russell. Nearly twenty years in the city of Detroit; practitioner until the last two years; had a very large practice. My rule

always has been to go right on, and never leave patient until the placenta is removed. In case of labor at full birth, have never seen the general adherence. If I was called after delivery, and there had been flowing and great prostration, would proceed to remove placenta, and at the same time give medicines, or make applications, to cause contractions. If there was no flowing, a delay of half an hour would not be dangerous, but I would go right on and remove the placenta. If flowing was going on, the more necessity for immediate action. Would not feel justified to administer remedies, and go away and leave my patient. In ordinary labor, only from eight to sixteen ounces of blood are lost. Would be the duty of physician to remove placenta, if not called till afternoon.

He should at once remove the placenta. In the case presented, the death is caused by antecedent causes and not by removal of placenta. Duty of the physician to detach the placenta and produce contraction of the uterus before he leaves the patient.

Cross examined. Hemorrhage sometimes takes place without detaching of placenta.

If at the hour of 2 o'clock in the afternoon and the Doctor should come and find the patient sitting up and taking broth, good pulse, placenta should be taken away at once.

Dr. Adrian R. Terry. Should immediately after labor examine the condition of the womb externally. If the womb is small, the placenta has passed out; if large, there is reason to suppose it still in the womb. If in fifteen or twenty minutes there is no expulsion of the placenta, it is the duty of the physician to examine the condition of the placenta by internal manipulation. If in from one to one and a half hours the placenta is not expelled, then it should be extracted at all hazards. While waiting, means should be taken to expell the placenta. If there appears tendency of mouth of womb to contract, there should be no longer delay. Due caution should be used in taking away the placenta. At the time of taking away the placenta means should be used to excite contractions of the uterus. The hand might be kept in, and so excite the contraction of the uterus. If flowing takes place with retention of the placenta, the physician should not wait for one moment. Causes of retention, 1st, Inertia; 2nd, Irregular contraction; 3rd, Adhesions of Placenta. If after waiting an hour or so, there is retention and no flowing, there is reason to believe, there is adhesion. Physician can not leave the house more than a few minutes. If coming in after an hour and a half, duty of physician to ascertain at once the cause of

retention of the placenta. One of the most efficient means to excite contraction of uterus, is the application of the fingers to the uterus, in removing the placenta.

Offers to prove regular medical education of Defendant—to prove his diploma and his medical character and skill.

Objected to. Rejected and excepted to.

Defence rests. Plaintiff resumes.

Gertrude Webber recalled. My husband went to Pontiac. Is at home and well. Was with deceased all day until she died. Died between 2 and half past 2 P. M. Myself, Mrs. Graff and my sister-in-law were there when child was born. Child was born at 11 o'clock exactly. Have 3 children. Mrs. Weitz was there out and in. Mrs. Weitz was not there one half hour at any time. She came there at half past eleven. I went for Dr. Rudolph, and when I came back Mrs. Weitz was there. Dr. Rudolph was not at home when I went there. Dr. Rudolph came at 12 o'clock, noon. Mrs. Hoek directed me to go for plaintiff. Mrs. H. was pretty well when Dr. Rudolph came in, sitting in bed talking. Dr. Rudolph said, how do you do? She replied that she felt smart, if the after-birth was away, felt smart enough to get up. Dr. Rudolph asked if she had children, and felt of her pulse. Mrs. H. told the Doctor that before this, the after-birth had to be taken away by pieces when she was confined before. That Doctor then warmed his hand, greased it and examined under the bed-clothes.

Catharine Webber. Told the Doctor that the after-birth was in previous confinements taken away by pieces, and that the last would be discharged in 8 or 9 days. I attended Mrs. H. at her confinements in Germany. I saw the Doctor in Germany pinch off the after-birth in pieces the size of my thumb. Had been no flowing when Doctor Rudolph first came in—not so much as to put a cloth under her. Doctor Rudolph staid there about half an hour, and left medicines to be given her once every half hour, 6 or 8 drops, to bring on after-pains, and went away saying, he would be back at 2 o'clock, and you know where I live, send for me if anything should happen. Dr. Rudolph came back a little before 2 P. M. By running through an alley Dr. R.'s office is about 40 steps from Hoek's house. Mrs. Graff was midwife. Mrs. H. showed me the day before where midwife and Doctor Rudolph lived. Do not know that Dr. Rudolph made any external applications. Dr. Rudolph prescribed wine-soup in case she had appetite. Think some soup was made by Mrs.

Weitz, but not sure. When Dr. Rudolph was there at 2 P. M., Mrs. Hoek was sitting in bed eating something. She had the plate in her left hand and the spoon in her right eating. When Dr. Rudolph came in, he asked her how she was, she said well and he said I will not interrupt you. Was no flooding between the times Dr. Rudolph was there, and Mrs. H. expressed her astonishment that there was no flooding. Heard nothing said about after-pains. Dr. Rudolph said he would come after 12 or 15 minutes. He was gone only 8 or 9 minutes. Mrs. H. was dead when he got back. Mrs. Weitz said Dr. Kieffer must come. Dr. Kieffer came. When Dr. Kieffer was there I was not there. I was out long enough to run to Dr. Rudolph and back, when I came back Dr. Kieffer was jawing with midwife. He said, why didn't Dr. Rudolph take away the placenta? When Dr. Kieffer said, How are you? Mrs. H. said, here: it hurts me here, (putting her hand on her bowels,) otherwise I am well. At the time Dr. Kieffer was jawing with midwife, Mrs. H. said: Oh Lord! oh Lord! and Dr. Kieffer ordered them out of the house. She went out of the back door. Dr. Kieffer said, wherever you are you have to blame Dr. Rudolph. Dr. Kieffer ordered me out and I went out. I heard Mrs. H. cry out twice, loud. I went back and asked her how she was. She said: O God! he has torn my heart loose. She then called twice "soup! soup!" and died. Dr. Kieffer had his coat off. Dr. Kieffer just took a cloth and wiped his hands, put one arm in his coat and the other arm in as he slipped out of doors. Before Dr. Kieffer went away, there was no blood. After he went away, the whole floor was covered with blood, it ran through the bed. No blood on the floor before Dr. Kieffer came there. After Dr. Kieffer went away, I called him back, and said, you murderer, you have taken my sister's heart away. He told the midwife or me to bring the after-birth to my house. Mrs. Ege was there. Dr. Kieffer said Dr. Rudolph will have to pay for it well. This was when he came to my house and asked where Hoek was and when the cars would come in.

Mrs. Susannah Graff. Am a midwife, six years at the business. Have had a good many cases, more than two or three hundred. Attended Mrs. Hoek—birth about 11 A. M. Can't tell who was present. Think Mrs. Webber was there, but not sure. Did not take away after-birth, found it fast to womb, was in good circumstances, was lively after child was born. At half past 11 found after-birth did not work right. She then wished the Doctor to be sent for. Dr. Rudolph was sent for, but did not come. At 12 he came, he

asked how the case was, I told him the after-birth was grown to the womb. Dr. Rudolph examined her, sat on the side of the bed and questioned the woman about prior confinements. Mrs. H. told him she was obliged to have a Doctor in all her confinements to take away the after-birth, and Mrs. H. told Dr. Rudolph that the Doctor had been unable to take away the placenta, but it had to go away with the cleansing of the womb. Dr. Rudolph then put some drops in water and told me to give some in a quarter of an hour to fetch on after-pains. This was towards 1 o'clock, couldn't say time for sure. Rudolph went away and left word to send for him if anything should happen. Dr. Rudolph came back, couldn't say at what time, to see how Mrs. H. was. He went to see if after-birth had come away. Then Dr. Rudolph told her, you keep on with these medicines, for after-birth has not yet come away. Went away again and said he would be back. Can't say whether he said he would be back soon, or when. Then some woman came in and said they should send for Kieffer. Somebody got Kieffer, but don't know who. When defendant came in she had her hand on Mrs. Hoek's head and with the other hand she gave her some soup. Dr. Kieffer asked, what is the matter here? She told him, the after-birth was not removed. Defendant commenced reprimanding her and said, some other time had better send for Dr. Rudolph again. Dr. Kieffer then pulled off his coat. I took my position by the window and did not mind him any more. He then took the after-birth away. I did not look at it. Defendant then said, give her some wine-soup. Mrs. H. asked for soup and I went to give her some. She breathed twice and died. Defendant told me to bring him the after-birth. Mrs. Hoek's sister brought the after-birth to defendant. She had no after-pains after child was born. Had no flooding till defendant came there. After defendant came, did not look any more. Did not examine after she was dead. I went to Mrs. Weitz's house. Don't recollect whether Mrs. H. said anything when defendant took after-birth away. Mrs. H. was a little weak from the time Dr. Rudolph first came there, but not dangerous. Dr. Rudolph said the drops given were *Montakom* drops. They are used to produce after-pains. Dr. Rudolph ordered cold applications to the belly, in case the blood should flow strong. No more flowing at birth than usual. Did not see any blood on the floor before defendant came. I went out of the room, the Catholic Priest came there and saw her alone. No flooding. Defendant gave no medicine. Can't recollect whether Mrs. H. sat up in bed at all. Mrs. H. spoke often and said the blood ought to run more. Womb was

open and not contracted, not acting. Can't tell how long defendant was taking after-birth away.

Cross-examined. Don't know what time the Priest was there, had no clock there.

Re-examined. Priest was there after child was born. Don't know whether was any watch there.

Bridget Alderman. Was with Mrs. Hoek at last sickness. Was there when Dr. Kieffer came in. When Dr. Kieffer came in she felt much better. Defendant took off his coat and left it on a box between the table and window. Asked for oil and got it, and then examined womb and she gave three awful screams which could be heard across the road, and told him to go away for he was killing her. She complained very hard for five minutes and died. She spoke these words in English. She spoke first-rate English. She said he was taking her heart's blood. Mrs. Weitz was making soup. I went for wine to Dr. Scherer. This soup Mrs. H. had never tasted.

Dr J. B. Scovel. Have been 22 years practicing physician. Have had 400 to 500 cases. If called 1 hour after child was born, physician would suppose something was wrong. Would enquire history of previous deliveries, if placenta was not taken away would administer medicines.

If called within 2 hours, would not proceed to take away placenta without striving to excite action. Think it not bad practice to go 40 steps away, after administering remedies. If called at 12 and returning at 2 P. M. would allow her to sit up and take her broth. A physician should not come in and take away placenta without applying external remedies or internal, when there was no flowing. Best authorities say when there is flowing, no hesitation about removing the placenta. Have had cases where placenta has remained many days.

Dr. Chas. Brumme. Physician; practiced 10 or 11 years. Educated in Goettingen. Familiar with obstetrics. If called to see woman 1 hour after delivery, would instruct myself in the case.

Question. Suppose when called 2 or 3 hours after delivery you should find the woman sitting up, eating soup, strong, in good health, no flowing, and no contractions of the uterus, and the after-birth not come away?

He would institute an examination, institute means to produce contraction and see whether the after-birth could be taken away by pieces or altogether. If patient was strong, would wait to see whether contractions arose, and there was no flooding whether to wait 2 or

3 hours would depend on individual judgment in regard to the patient, should not be good practice to remove placenta at once, when patient was well and there was no flooding. If he was satisfied that uterus would contract on itself, would at once remove placenta. There is always danger whether placenta is removed or not. In case put by Terry, would not think taking away placenta, the cause of death.

Cross-examined. Might go away when there was no bad indications if midwife was there, very hard question to answer. Thinks he would not go away, if sent for by midwife in case of difficulty.

Re-examined. Might go away if there was a more urgent case, or for instruments.

Dr. Baars. 18 years physician, 200 to 400 cases of obstetrics. Educated in Amsterdam. If called within 1 hour, would examine into state of things. If woman was strong, with womb inert and habit of adhering placenta, would recommend external friction and internal remedies, and if woman was in this state, might go 40 steps off, would go away. No physician would remove placenta at once when womb was inert.

Plaintiff rests.

The Jury returned verdict for plaintiff finding \$300 damages.

REMARKS BY THE EDITORS.—We regret our inability to complete the report of this case of libel, by giving the charge of the learned judge on the facts, as well as on the questions of law involved in it, when submitting them to the consideration of the jury, as no notes have been preserved of his remarks. Although the impression left upon the mind of those, who listened to the opinion of the court, was, that there were no grounds for the rendition of such a verdict as was ultimately found by the jury, it would have been more satisfactory to the readers, as well as to the editors of the journal, if the law of the case could have been rendered as clear as the medical testimony is explicit.

But as our primary object in procuring these notes, the publication of the opinions of the medical experts, on a point of much interest in practical obstetrics, will have been reached in the printing of the testimony of these gentlemen, the strictly medical reader will not so much regard the omission of that part of the trial, more specially legal in its affinities.

One reflection will naturally arise in the mind of every intelligent reader of such a case as this, and one which may in many individuals impair their confidence in and lessen their attachment to an institution heretofore held sacred, that of the right of trial by jury.

The difficulty, if not the absolute impossibility of so constituting a jury, as to secure to a physician in his professional capacity a trial by his peers, will have been made apparent by the present case. How it can ever be achieved, is a matter of interest to the whole profession.

It may increase the interest of our readers in the trial itself, to know something of the parties engaged in it.

The plaintiff or prosecutor in this cause, is one of those hybrids, extruded from the architypical standard of normal existences, which, without awaiting the period of natural development by the process of gestation, spring full grown into being, on the illicit conjunction of two such bi-sexuous hermaphrodites, as Hydropathy and Homœopathy. The first known of him here, was during the blighting influence of Cholera, when he emerged from a Wine and Beer Hall, a full length Homœo-Hydropath, making very good head way before a wet sheet, filled with a divine afflatus, from the spirit of old Hahnemann.

The defendant is an honorable member of the profession, admired for his intelligence, respected for his social amenity, and esteemed by his medical associates for the frankness and uprightness of his department.

The jury were undoubtedly embarrassed by the conflicting character of the testimony, referring to the condition of Mrs. Hoek before medical assistance was sent for, and the occurrence of her death so soon after the removal of the placenta. Dr. Kieffer, in the moribund condition of the patient, would have been justified in doing nothing.

We had designed to make some references to authorities on the practical question involved, viz: the time that may be allowed to elapse, after the birth of the fœtus, before the accoucheur should proceed to the removal of the placenta, but find it inexpedient, in view of the space already occupied by the testimony and our own remarks.

EXCISION IN SPINA BIFIDA.—Dr. Nott, of America, has published a case recently, in which he had recourse to the extraordinary and novel operation of cutting away a large spina bifida. The parts subsequently healed perfectly.

THE LONDON LANCET.

ARTICLE II.

*Porphyra, or Scurvy as Originating from Moral Causes—
and also from Insufficient Nutrition, when Supervening upon
Typhoid Fever.* BY Z. PITCHER, M. D.

In a recent number of this journal, a case of Delirium Tremens was reported, believed to have originated in the excessive use of tobacco. In the estimation of the reporter, it possessed some interest, on account of the enormous quantity of opium required to replace the effect of the tobacco, as well as from the manifestation of scurvy during its progress, evidently attributable to the influence of intense nervous excitement and the absence of adequate nutrition.

On that occasion, it was intimated that this topic would be referred to again, which is now done, not because the general subject of scorbutus requires elucidation, that having become a rare disease since the circumnavigation of the globe, by that bold and energetic seaman, Captain Cook, in the *Resolution*. The Hygienic regulations adopted for the government of the crew of that noble ship, consisting of one hundred and eighteen men, by the observance of which, she made a cruise of three years and eighteen days, traversing the climates lying between fifty-two degrees north and seventy-one south latitude, with the loss of only one man by disease, has nearly erased it from the schedule of modern nosologists.

The relations subsisting between this disease and the diet of those who became its subjects, were understood as early as the time of Riverius. And from that period till the armies of England, under the command of the Duke of Marlborough, invaded the Netherlands, when the opinions of Sir John Pringle became of paramount authority in medicine, salt provisions were regarded as the most obvious remote cause of scurvy, and a putrescent state of the blood the proximate element in its development. These opinions were so fully adopted by Dr. Cullen, the eminent Scotch Professor, that he was unwilling to admit the existence of any other. His supposition that the animal economy has the power of evolving saline matter of an ammoniacal character from all kinds of food; which matter, like neutral salts when applied to blood drawn from the body, dissolves the crasis of the animal fluids and renders them putrescent, although swept away by the advancing and increasing light thrown upon the pathway of the physician by the scalpel, the microscope and the crucible, still leaves the traces of its former existence in the professional mind. To assist in the eradication of what remains of this

error, and to invite attention to the influence which the ganglionic system of nerves exert in the production of scurvy, and the dependent relation it may be shown to hold to the Typhoid Crasis, "marked by the destruction of fibrin, and the comparative preponderance of blood-globules," is what I propose to myself to attempt on the present occasion.

No important additions to the literature of Porphyra have been made for a good many years past. The reason is obvious. The old portraits of it are so well embalmed in the classical English of our predecessors, that there has been no necessity for their being retouched by a modern pencil. I would not wantonly disturb their repose at this time, if I had not a practical purpose to accomplish.

When the Congress of the United States, in 1833, authorized the President to raise the first Regiment of Dragoons, the recruits to fill up the first battalion were enlisted under circumstances to them peculiarly delusive. This remark is not made with a design to impute blame to any officer engaged in that service. For all, citizens as well as recruits, were impressed with the idea, that the duty they would be required to perform during the period of their enlistment, would consist essentially of a summer trip on horse-back into the great prairies, now better known as the plains, and constituting part of the route to California. The officers engaged in this service, took so much pains to exclude men of bad habits and questionable character from this corps, that young men of good families and those occupying desirable positions in civil life, were tempted to enter the army for the purpose of sharing in the pleasures of the march to the Rocky Mountains.

Soon, the mildew of disappointment tarnished all these bright anticipations. Hope was supplanted by despondency, and that was followed by despair and in some cases ended in death.

During the time required to raise and organize such a body of troops, summer passed through the changes which ended in a cheerless autumn. Winter approached, and preparations had to be made to guard against its rigors on the banks of the Arkansas river, where the horses could be foraged in a cane-brake. Here the young man, accustomed to the comforts of civil life, found himself detailed for the duty of splitting staves to make flooring for his tent, for mounting guard, and in addition to which he must groom his horse and clean his stable, and take his turn in cooking either for his mess or his company. In this changed state of things, the recollections of home would break over his mind like the combings

of a billow, producing in some the phenomena of nostalgia, which I then recognized as an acute hypochondriasis, in others a less severe gastro-duodenal distress, but such a deranged state of the assimilating organs, that a solution of the tissues ending in unmistakable scorbutus, sooner or later supervened.

Whilst these labors were being performed and these processes were going on in the systems of those who yielded to the influences of the moral causes just alluded to, the troops were fed on fresh bread every day, had a ration of fresh beef, with rice as a vegetable twice a week, pork and beans the other five days, and at all times coffee and sugar for breakfast. The more succulent vegetables were not to be regularly obtained, although the infantry, occupying log buildings in the vicinity, shared with the dragoons their potatoes and cabbage, and retained at the same time the most perfect health, only one case of scurvy occurring in the regiment and that under the following circumstances. A very insubordinate and bad tempered soldier had been guilty of such a breach of discipline as rendered it expedient for a court martial to sentence him to solitary confinement and to be fed on bread and water. Before the expiration of his sentence I found it necessary to apply to the Colonel of his regiment for mitigation of his punishment, on the ground that he had become scorbutic, which I ascribed more to the corrosive effect of an unsubdued temper, than to his farinaceous food.

These cases occurring at the time when the Infantry Hospital contained an unusual number of patients with Typhoid Pneumonia, forced upon my attention the analogies of the Typhous crisis with the disease prevailing in the Dragoon camp, and led me to adopt the opinion since strengthened by subsequent experience, that in both these affections, as well as in some others, to which they are nearly related, the depressing influence of painful mental emotions, the sedative effect of cold and moisture, conspire with the want of nutrition in making such an impression upon the nerves of organic life as to arrest the processes necessary to the purification of the blood, whence arise the phenomena appertaining to humoral pathology.

Here, where the Typhoid diathesis has predominated for the last five or six years, instances have occurred during the past autumn, which show how it can be melted down and recast into any one of the related forms of disease, the product being varied by the mode of treatment, the heroics of modified Thomsonianism producing one result, the stolidity of Hahnemann another, and the Hydraulic system a third, modified by the partnership it may have formed with one

of the others. This blending or interfusion of nosologically rather than pathologically distinct affections has received confirmation from the effect of the most antagonistic of these modes of treatment. The Eclectic or Thomsonian producing gastro-duodenitis, with symptoms in some cases simulating yellow fever and in others the lividity of cholera, whilst the fasting appertaining to the folly of Homœopathy, has suffered the depravity of the fluids to increase from day to day, and the nervous energies to become exhausted, till the tissues gave way and the blood escaped from every outlet of the body. Of the latter, I will give an illustration.

On the 29th of August, I was requested to see Mr. H. Gager, who, I was informed by the members of the family in which he lived, had been under the care of a Homœopathist, who had been treating him for Typhoid Fever for the preceding twenty days, during which time and for five days previous to the commencement of his attendance he had had no alvine evacuation at all and scarcely any nutriment. He was quite delirious, and trembled like one in delirium tremens. The pulse was small, frequent and feeble. Skin covered with petechiæ and patches of ecchymosis. Gums spongy and teeth loose. A dark blood oozed from the mouth, nostrils and ears, and the urine was also bloody.

Some nutriment was provided for the young man, and his bowels gently moved by tea-spoonfull doses of olive oil, to which five drops of Spirits Turpentine was added. The dejections occasioned by this measure consisted of a pultaceous mass of black blood. As was expected, he continued to sink, and died on the thirty-first of August.

The notes of the following case were furnished by Dr. Christian of this city.

“Mrs. —, when she came under my observation, had been about twelve months under homœopathic treatment, which had brought her *successfully*, and with great *eclat* to the doctor, through *dropsy of the heart, inflammation of the brain, Typhoid Fever*, and lastly her confinement.

“From information elicited on examination into the previous history of the case, the dropsy of the heart appeared to have been some functional derangement consequent upon an anæmic condition. The inflammation of the brain apparently was neuralgia, arising probably from the same cause.

“When we first saw her, several weeks after her delivery, she presented a perfectly bloodless surface, mouth and throat distressingly sore, exhausting diarrhœa, and vomiting of every thing taken into

the stomach, even to the sugar pills which, however, continued to be administered and taken with astonishing perseverance, and all nourishing diet strictly prohibited.

“Although to the perception of nurses and friends, the patient was fast failing, the attendant could see, or affected to see, nothing but daily improvement.

“At length, tormented by the distressing vomiting which followed upon taking her pills, and eager for more substantial nourishment, the patient one day, by the advice of her nurse, discontinued the pills, and resorted to nourishing food. There was no vomiting after it, the diarrhoea ceased, and she had quiet rest at night, which she had not previously for weeks.

“But the improvement was only temporary, she was again persuaded to return to the little pills and low diet, and with them all the distressing symptoms again returned. This continued for some days. A change of treatment was resolved upon, and an experienced and eminent physician called in. He at once pronounced an unfavorable prognosis, perceiving that the vital powers were too nearly exhausted for them again to rally. By request, however, he continued his visits and the change was at once apparent to all, in the relief from many distressing symptoms. There was a feeble attempt of nature to rally, but she gradually failed. The vomiting again returned, the matter of which consisted of greenish watery substance ejected by a sudden spasmodic action, hemorrhage occurred from the gums and nares. The soreness of the mouth became aggravated, purpuræ showed themselves on the lower portions of the body, blood oozing from them, and she died.”

If any question the existence of the relation I have imputed to Porphyra and the Typhous crisis and the consequent necessity of treating the autumnal fevers which occur at one epoch, very differently from those which appear at another, I would say to them, that there is not in medicine a doctrine or opinion more correctly inculcated than that entertained by Sydenham in regard to the connection subsisting between what he calls the “distemperature” of the air, and the pathogeny and dynamis of the prevalent diseases. There are in every recurring year appreciable atmospheric changes, sufficient to fill the world with diseases by their action as exciting causes. But for the influence of this underlying “distemperature” acting as a predisposing agent, there would be an annual reproduction of the same *natura morbi*, requiring for their removal the same system of therapeutics. Every intelligent observer knows that the nature,

force, and external aspect of diseases change with the cycles, as they mark the epochs on the wheels of time. But it requires a degree of longevity to which all do not attain, to learn from personal experience that the modes of treatment adapted to these morbid mutations are not to be regulated by fashion, or a belief in the dynamization of drugs essentially inert, by importing to them a spiritual potency in the mode of preparation, but by an intelligent conformity or adaptation of the therapeutics, to the changed and ever changing pathogeny.

That venesection is less frequently resorted to now, in the treatment of paludal fevers, than it was from 1820 to 1839, is an admitted fact, but not an evidence that it was improperly employed then, or that it has fallen into disuse at the present time, under the dictation of that caprice which regulates in social life, the selection of the materials and prescribes the mode in which our garments are to be made and worn. Whoever has had the opportunity of comparing the full and active state of the circulation which marked the advent of our fevers at that time, with the nervous prostration which followed the first chill in the fevers of 1854, and taken notice of the condition of the blood when drawn from the arm at these different epochs, must have perceived that the changes in treatment are the results of a clearly discerned necessity, directly related to the dynamism of the disease prevailing at the periods alluded to.

In the first of these epochs, the symptoms were such as are found combined in the condition called by the Pathological anatomists the *Fibrin Crasis*, and the blood when drawn presented the phenomena clustered under the term hyperinosis. The course of the disease was more rapid, and local affections bore more the marks of a true inflammation.

Now when the nervous system bears the onus of disease, the blood drawn assumes a dingy red, the serum reddened by a partial solution of the blood-corpuscles, in which are floating curd-like fibrinous flocculi.

If to this condition we add the effects of depressing emotions and a faulty or insufficient diet, we produce the phenomena of scurvy, and in the death of patients committed to our care, who are not sustained by adequate nutrition, we become criminally allied to the fatal event.

The readers of the *Peninsular Journal* will have perceived that I make no allusions to the Nosological distinction heretofore made between cases of *Porphyra* occurring on sea and on land. I believe them to be identical, but do not propose to go into the discussion of that question at this time. I have said thus much of scurvy and of

the circumstances which favor its out-growth from an atmospheric diathesis, for the purpose of putting younger members of our profession on their guard against the adoption of an improper dietary, in the treatment of their cases of Typhoid Fever.

ARTICLE III.

Nux Vomica as an Aperient.

BY WM. BRODIE, M. D.

My attention has been called to this agent for chronic constipation by reading a short article in the *Boston Medical and Surgical Journal* of January, 1856, copied from the *London Med. Times and Gazette*, as follows :

Nux Vomica as an Aperient.—Among the conditions over which *nux vomica*, and its active principle, strychnia, possess most useful powers, is that of habitual constipation, from muscular atony of the intestinal tube. At the City Hospital for Diseases of the Chest, we observe that Dr. Peacock and Dr. Andrew Clark are both in the habit of frequently resorting to it for this purpose. It is generally given in combination with the compound rhubarb pill, and in doses of the extract of from a sixth to half a grain. Of itself it can, perhaps, scarcely be deemed an aperient—that is, it does not so much excite peristaltic action, as supply tone to the weakened muscular coat, by which it is enabled to respond efficiently to other irritants. Hence the need for combination with rhubarb, aloes, or some similar drug. Dr. Peacock mentioned to us a case under his care in St. Thomas' Hospital, in which a man of feeble intellect, and torpid nervous system generally, had derived great benefit from its employment. At first, the bowels were obstinately costive, and lavements produced no action ; but since the use of the *nux vomica* (twice daily, gr. ss.) they have so far increased in power and susceptibility, that simple injections are quite sufficient, and procure all the action that is necessary.

In connection with the above, the following case will possess some interest.

Mr. C——y, a resident of a neighboring town, consulted me some three years ago for constipation of the bowels. He was a farmer, and had done a great deal of hard work for 20 years past. He had suffered more or less during the time with the diseases incident to a new country, and at one time (as he said) from congestion of the bowels.

At the time of his visit to me, he was very spare in his habit, and his countenance presented a haggard aspect, both conditions arising from the state of his intestinal canal.

His bowels would remain inactive for days at a time, when his abdomen would begin to swell, accompanied with a great deal of pain, especially in the region of the sigmoid flexure of the colon, to obtain relief from which, he was necessitated to take large quantities of cathartic medicines.

Upon examination of his case, I determined upon a mild course of mercurial alteratives in the form of the pilula cathartica composita of the U. S. Dispensatory; for a short time this answered well, when the old condition returned even worse than before, and the pills were useless. Having seen the beneficial effects of *Mettauer's aperient solution*, of which the following is the formula he was put upon its use.

R.

Aloes Socat, oz. $2\frac{1}{2}$.

Super. carb. sod. oz. 2.

Aqua O. 4.

Spirit. lav. compos. f. oz. 2.

From which, after digesting for fourteen days, the clear liquid may be decanted, or it may be suffered to remain on the fœces. Age greatly improves it, both in power and taste.

The usual dose is a fluidrachm, but it may be augmented to an ounce, to be taken half an hour after dinner and supper.—*N. Y. Jour. of Med., Sep., 1851.*

For a time, this remedy answered in a measure our expectations, but like the former became entirely inert, except in large quantities. Other remedies followed in succession until a year elapsed, when in conversation with Dr. Pitcher of this city, upon the case, he thought that most probably the cause of the constipation lay in the muscular tunic of the intestine, it being in an atonic or paralyzed state; with this view, Dr. P. suggested the use of Strychnia, the active principle of the nux vomica. The following pill was therefore prepared.

R.

Strychniæ, grs. 2.

Ext. Hyosciami. }
Gum Aloes, } *a. a.* scruples 2.

Pill Hydrarg, scruple 1.

Misce fiant pilulæ, No. XL.

One pill to be taken at bed time, as often as required.

Four boxes of these pills, No. 40 each, have sufficed till the present time, and he reports himself as having no further trouble with his bowels.

In this case I am of the opinion that the state of the intestines was caused by the habit of the patient wearing a belt tightly drawn around his body, in the place of suspenders, and which he left off a short time before he came under my observation.

I have used this pill in another case, with marked benefit, and have no hesitation, therefore, in bringing it into the notice of the profession.

DETROIT, 1856.

ARTICLE IV.

Notes of the Anatomy of the Gymnopus Spiniferus.—Dum.
Tryonix Spiniferus.—Les.

Among the remarkable forms which, while preserving a general conformity to typical structure, nature has known how to impress upon the vertebrate organism, there are perhaps none more heterodite than those which constitute the order *Chelonia* of Cuvier. They have ever attracted the attention, and often become the subjects of anatomical investigations, as the great works of Cuvier and Meckel, and the splendid monographs of Bojanus and Rathke, abundantly attest.

The following desultory notes of observations made in dissecting several specimens of the genus, of different ages, and of both sexes, are merely offered as a contribution to the anatomical history of the genus, in points that appear to have been either imperfectly or erroneously described.

Hitherto, the species, though found not unfrequently in the streams that flow westward into Lake Michigan, and southward into the Mississippi, have not been found in the streams that flow down the eastern declivity of our peninsula. I am, therefore, indebted to the disinterested scientific zeal of my friend Dr. Beach, of Coldwater, for an opportunity of investigating its anatomical structure.

The entire length of one individual (a female) was twenty-five inches, the carapace alone measuring twelve and a half inches.

In common with other species of this genus, the ribs are less perfectly united by, and invested with, the ossification of the sub-dermal and intercostal fibrous membrane; and, hence, the margins of the ribs may, in general, easily be traced in the interior of the carapace. But the most marked result of this defective ossification, and one not noticed by any recent writer, is the entire separation of the eighth pair from the anterior ribs, they being held in position only by the

dense fibrous investment. Nearly one-half of the length of the greatly flattened and expanded carapace, and more than one-fourth of its breadth, being composed of a coriaceous fibrous membrane, which, by most writers is incorrectly stated to be cartilage. Cuvier (*Ossements fossiles, Tome IX., p. 398*), in remarking upon the peculiarities of the carapace of the Tryonix, observes "that there are eight pair of ribs, united by suture, which, in these as well as in the marine turtle, are not dilated to the outer end, but of which the dilatation extends with the age of the individual."

The jaws were distinctly serrated on their edges, and presented much of the aspect of bone, but a microscopic section exhibited only the angular nucleated cells of horny tissue.

The entire length of the alimentary canal, which terminated at half an inch from the extremity of a somewhat elongated tail, was about four feet,—the esophagus being nine inches, the stomach six inches, the small intestines two feet and three inches, and the large, including the cloaca, only about six inches long.

This absolute and relative length of the canal indicates a purely carnivorous regimen. In the *Emys picta*, according to Cuvier (*Anat. Comp., Tome IV., Pars II., p. 200*), the relative length of the canal to the body being as 5 to 1; in one specimen, not exceeding 2 to 1. Prof. T. R. Jones, of London, in copying, but not quoting, Cuvier (see *Cyclop. Anat. & Phys., Art. Reptile*), remarks: "In the different species of Emydes, which are more carnivorous in their habits, and in the Tryonix, the alimentary canal is shorter—at least the large intestine, which is not longer than the small."—(These being here contrasted with the herbivorous members of the family.) In a note by Mons. Duvernoy, in the second edition of Cuvier, the error is partly corrected. The two portions of the intestine are continuous with each other, without the formation of an angle, and separated only by a slight valvular constriction. The large intestine, although slightly larger than the small, was much less muscular, and hence more distensible than it.

The tongue is very short, triangular, soft, but not fleshy. Arranged along its surface, and somewhat in rows, as well as on the fauces and about the rima glottidis, also over the edges of the cornua hyoides, there exists a great number of delicate fringes, resembling, especially on the hyoid arches, the fimbriated gills of the Menobranchus, or the internal gills of a tadpole. Cuvier, after describing the reversed conical and horny papillæ of the esophagus of the marine turtle, remarks: "In other genera of this order, the esophagus presenta

only longitudinal folds and numerous orifices of mucous crypts." In the Tryonix, a large part of the esophagus is covered by fringe-like, and often bifid, processes.

The form of the stomach was that of an elongated transverse canal folded upon itself, its muscular parietes much thicker than those of the esophagus or intestines: its mucous membrane was found longitudinally plicated, apparently from the contraction of its muscular tunic. The mucous membrane of the stomach and intestines was nowhere plicated, but finely and beautifully reticulated over the entire surface.

The very complicated hyoid apparatus presented only slight differences of relative proportion from that of the species described and figured by Cuvier in the *Oss. Fossiles*.

The liver is composed of two large flat lobes, connected merely by two narrow transverse bands, the bile cyst attached to the right lobe.

The pancreas is a narrow and flat organ, attached closely to the duodenum, and about four inches in length.

The spleen is nearly cylindrical, about one and one-half inches long, and one-half inch in transverse diameter.

The kidneys are multilobular, the lobes overlapping each other.

The ureters terminate in the cloaca, about nine lines below the orifice of the bladder, upon the side of the nipple-like process of the oviduct, precisely as in the Monotreme *Ornithorhynchus*, described and figured by Owen in the *Philosophical Transactions*.

The bladder was very obviously muscular, much more so than in the *Emydæ*, and of an uniform oval outline.

The heart is composed of two large fleshy auricles, and, also, upon external inspection, especially when in motion, apparently of two ventricles: an internal examination, however, revealed a cavity but partially divided by a fleshy septum. Four arterial orifices, guarded by valves, were observed,—three of which communicated with the cavity on the left side of the septum, and one, that of the pulmonary artery, on the right. The *venæ cavæ* pulsated synchronously with the ventricles, and alternately with the auricles.

As a careful examination of the muscular system was not made, but few peculiarities were here observed. The retractors of the neck presented some interesting differences from those of others of this order.

The *retrahens capitis et colli*, Cuvier describes as arising, by its longer part, from the ribs of the fifth and sixth dorsal vertebræ, within

the carapace, and, passing in the interval between the lungs, on the sides of the anterior part of the neck, is inserted, by fasciculi, to the transverse apophyses of the third, fourth and fifth cervical vertebræ, a long fasciculus passing to the head, to be inserted on the basilar bone; the shorter portion, arising from the fourth and fifth dorsal vertebræ, beneath the articulation, goes to be inserted into the side of the sixth cervical vertebra.

In the Tryonix, the retrahens cervicis is a single muscle on the side of the neck, and at its anterior attachment, but a triceps, at its posterior insertion. It is attached to the side of the first cervical vertebra, and, descending by its side, reaches the thorax, where it separates into three portions, which still lie side by side in the anterior part of the cavity and between the lungs: it there divides, one part passing down the side of the spine, through the pelvis, to be inserted into the distal portion of the fourth caudal vertebra; the other parts diverge laterally, one being inserted into the middle of the intercostal space of the sixth and seventh ribs, the other into the outer part of the intercostal space of the seventh and eighth ribs. This powerful retractor replaces the retrahens capitis collique of Bojanus.

In a male, about one foot in length, dissected in November, several striking peculiarities of structure were observed in the organs of generation.

“In the Chelonian reptile,” says Prof. Jones, “the penis is very large, and both in its structure and form, it resembles somewhat that of the ostrich. It is long and nearly cylindrical in shape, and enlarged towards its extremity, which terminates in a point. A deep groove extends along the whole length of the dorsal surface, which becomes gradually deeper as it approaches the glans, near the middle of which it terminates by a kind of orifice divided into two by a papilla.” Such, with some further details of internal structure, is substantially the account given by Stanneus, Wagner, and other writers on the comparative anatomy of this organ. In the male Tryonix the writer dissected, it was six lines thick and four inches long, in its relaxed condition. At the posterior extremity, two large, soft, diverging and erectile bulbs were found, the erectile tissue of which extended thro’ the whole length of the cavernous bodies, and constituted the mass of the complex glans. The corpora caverernosa were dense, and less distinctly erectile. The typical single glans was here replaced by a divided organ, each lateral moiety being deeply bifurcated, and between the lateral, a central azygos part projected, nearly equal in length, and somewhat thicker than the lateral branches—the whole

glans being thus divided into five parts. A deep groove extended through the whole length of the body of the organ, and, on reaching the glans, divided into four branches, corresponding to the divisions of the lateral parts of the organ. This singularly complicated structure, while it presents some analogy to that of the same organ in the Monotreme, especially the Echidna, which is also quadrifid, yet more nearly corresponds with the doubly-bifurcated penis of the rattlesnake and viper, but is even more complicated than in these reptiles. If, as Prof. Owen supposes (*Cyclop. of Anat. & Phys., Art. Marsupialia*), the bifid extremity of the penis is an adaptive structure, corresponding with the double uteri of the female, and having reference to multiparous reproduction, why do we not find a quadruple uterus in the female Tryonix? Is not the teleological significance rather suggested by the highly erectile structure of this part of the organ, and connected with the duration of the copulative act? The position of the cloacal orifice, as before stated, will suggest an explanation of the length of the organ. The penis is furnished with a pair of retractors, attached not, as stated by Prof. Jones, to the pelvis, but to the sides of the body of the fourth dorsal vertebra, from which point in its backward course it passes behind the broad flexor caudæ ischiadicus, and passes beneath the sheath of the penis, on the abdominal surface, near its base, and is ultimately inserted into the median process of the glans.

The protrahens penis, which is also a slender muscle, arises from the sides of the fourth caudal vertebra, and, ascending into the pelvis, is inserted into the bulb of the penis, or the dense fascia that covers it. In their attachments, as well as mode of action, these muscles differ essentially from those described by Bojanus from the *Emys Europæa*.

The testes, in a comparatively young individual, were very large, being one and one-half inches long and from three to four lines thick—thus assuming the elongated form of the percoid rachiante reptiles, rather than the round one common to the Chelonix. The epididymes and the vas deferens were very long and convoluted; and the latter, turgid with a white, semifluid substance, which, when microscopically examined, was found to be composed, in great part, of spermatozoa—thus evincing an active state of the glands, so late as the month of November.

The ureters and vas deferens entered the cloaca at the same point as the ureters and oviducts in the female, and formed also a small, but distinct papilla.

The form, connection and mobility of the clitoris in the female, are like those of the male organ of intromission, but does not exceed nine lines in length.

The oviducts were very long, and possessed a distinct sphincter near their prominent orifice. The distal, or interior one-third, being abruptly narrowed to a small tube, might be supposed to represent the fallopian tubes, while the lower, and much the larger two-thirds, would be homologous with the uteri of the Marsupiales and Monotremes. The mucous membrane of this part was remarkably smooth and white, and presented no appearance of crypts or follicles, yet it must have possessed the power of rapidly secreting lime, as in each of these tubes seven eggs with shells were found.

The ovaries were six or eight inches long, appearing as the slightly thickened edge of the mesovarium, which bound it to the kidneys and other viscera. It was scarcely more dense than the ovary of a frog, but the ova were produced only in the border of a narrow strip of the outer part of the membrane.

The peritoneal canals, which, in other Chelonians, penetrate nearly to the glans penis, do not, in the Tryonix, reach one-third of the length of that organ.

The general vascular and nervous systems were but cursorily examined; sufficiently, however, to prove the existence of other points of interest and novelty: and the writer hopes, at no distant day, to make these the subject of a monograph.

Query: Does not the growth of spines from its soft skin, as well as the points of internal coincidence, indicate a positive affinity to the Echidna?

SAGER.

ARTICLE V.

Hospital Report—St. Mary's Hospital.

During the past month, there has been no marked change in the type of disease. The admissions have been about the same as during the previous month as regards number and variety.

The following case is reported as presenting some points of interest. Mrs. Hennessy, Irish woman, age apparently between 35 and 40, married, was admitted to St. Mary's Hospital, Oct. 7th, 1855,

presenting a very distended abdomen from effusion into the Peritoneum. Previous history as far as ascertained as follows. Had miscarried some two months previous, which event was succeeded by puerperal fever with a peritonitis of a sub-acute character. On admission still had general febrile action, but not of a high grade, and complained of pains in her right side and about the abdomen. Bowels were constantly costive throughout, and the urine scant. The tongue was of a smooth, glassy and purple appearance, but varying during the progress of the disease, and at times approaching to an almost healthy appearance. Considerable thirst and a moderate appetite up to within a short time of her decease.

R. ℞ii Castor Oil with xx Gt. Turpentine. To be taken immediately. Hyd. C. Creta, gr. ii, Quinine, gr. ii, Morph. $\frac{1}{8}$ gr. three times a day, and Blister to abdomen.

Oct. 10. Repeat Blister and continue Quinine and Morphine.

Oct. 11. Bowels again bound. Ordered Salts and Magnesia and Quinine and Morphine at night.

12th. Distention of abdomen, increasing, and urine still scanty.

R. Tincture Digitalis, Gt. v. every 4 hours.

13th. Repeat Blister and Continue Digitalis.

14th, 15th, 16th. Continue Digitalis and drink warm solution of Cremor Tartar.

17th, 18th. Hyd. C. Creta ii gr., Dover's Powder gr. iv. every 4 hours.

19th. No improvement. R. Apocynin, gr. iii. every 3 hours.

20th, 21st. Continue Apocynin.

22nd. Complains of more pain on the right side. Ordered Blister, discontinue Apocynin and give Dover's Powder, gr. v, Quinine, gr. ii. Hyd. C. Creta. gr. i. 3 times and drink Cremor Tartar water.

26th, 29th. Morph. gr. $\frac{1}{8}$. every 4 hours and repeat Blister.

30th, 31th. Renew Blister at night.

Nov. 3rd. Ordered Elder Flower Tea for drink.

4th, 5th. Paint the abdomen and legs freely with Iodine and to have ℞i Rochelle Salts.

7th. Iodine continued and repeat Rochelle Salts with Magnesia.

10th, 12th. Drink Weak Gin Toddy, continue Iodine and to have Aselepin, gr. ii. Every 4 hours.

13th, 30th. Continue Aselepin and ℞i Spirits of Nitre 3 times a day in water.

Dec. 1st, 4th. R. Carb. Potas, gr. v, every 4 hours. Drink weak vinegar and water.

5th to 8th. Quinine, gr. ii, every 4 hours. Gin Toddy 2 or 3 times.

9th to 20th. Quinine, gr. iii, Apocynin, gr. iii. 3 times daily. Continue Toddy.

21st to 30th. Continue.

Jan. 1st to 12th. Continue Digitalis v Gt. every 4 hours in Buchu Tea. Continue Toddy.

13th. Deceased.

The above is a general outline of the treatment pursued in the case; varied at intervals of the treatment to answer varying indications, and to stimulate the secretions, particularly the alvine and the urinary, which were excessively torpid and which required frequent varying of the agents designed to act upon them, as by a short continuance the influence was lost, which they at first exercised over the secretions. Temporary amendment was sometimes apparent after essaying a new remedy, but all endeavors to cause an absorption and elimination of the peritoneal collection through the excretions were ineffective, and the distention constantly increased, with the difficulty of exciting the excretions, until relief was given by tapping. This operation was performed some four or five times, at first at intervals of several weeks, but the interval each time diminishing, until but a few days intermission could be suffered. About two wash-basins full of an almost colorless fluid was poured out at each operation, except the last one. At the last the fluid changed to an almost bloody discharge.

Autopsy, 12 hours after death. Very much emaciated but a great deal of fat still remaining attached to the omentum. Evidences of old peritoneal inflammation in numerous adhesions. The omentum found, attached to the external peritoneum at the opening made by the trochar, fairly pushed into it and adhering, thus accounting for the speedy cessation of the flow of fluid after the puncture, before the last, and the necessity for its so early repetition by the collection of water again, it having been opened near the last on two successive days. A large quantity of bloody like water was dipped out of the cavity, sufficient to nearly fill two large-size wash-basins. Just under the spleen a coagulum of blood was found of the size of a man's kidney. The spleen apparently healthy, but by pushing it about, blood was seen to ooze from its lower surface quite freely. (The left side was the one on which the patient was accustomed to recline towards the last of her illness.) The kidneys were to all appearance quite healthy, notwithstanding there had been so scant urinary ex-

cretion for so long a time. The liver was the most attractive point of observation, affording a fine specimen of the hobnail, and greatly atrophied, being hardly larger than a quart bowl. The peritoneum over the ileum presented numerous purpural spots from which the blood doubtless oozed in a great degree as well as from the spleen which gave the bloody appearance to the contained fluid. The external peritoneum presented the same appearance in a less degree. On opening into the bowel, the same condition was exposed on its mucus surface. There had been no passage of blood or bloody-like matter from the bowel.

The above case presents some interesting points. The portal obstruction offers sufficient explanation of the dropsical collection in the peritoneum; but what relation does the peritonitis bear to the other conditions? Does it stand in the relation of cause or effect? We should most likely at once admit the latter, ordinarily; but then again what relation does the miscarriage bear to the peritonitis? This event was almost immediately succeeded by the peritonitis giving rise to puerperal fever; and we should ordinarily attribute the peritonitis to the miscarriage, and the dropical collection, perhaps, might be attributed to a chronic peritoneal inflammation. We can only theorize in regard to it: that the disease of the liver was the exciting cause of the miscarriage, and the system being then predisposed, of the peritoneal inflammation also, which, perhaps, might not have followed, had the patient been otherwise in a healthy condition. c.

ARTICLE VI.

Case of Monstrosity.

REPORTED FOR THE PENINSULAR JOURNAL OF MEDICINE BY WM. W. GREENE, M. D.

The following case, presented to me a few weeks since, for examination, furnished the following notes:

Child aged nine months; body natural size and shape; urino-genital organs perfect; toes all webbed to the tip; fingers webbed to the last articulation, and lacking the first row of bones, each of the phalanges containing but two bones; chin, mouth and nose natural; cranium strangely distorted. Above the forehead, its base extending almost

to the vertex, arises a conical tumor about five inches in height, perfectly hard to the touch, over its whole surface, like the natural cranium: each temporal fossa is occupied by a similar tumor, presenting the same physical characteristics, except that at the apex of each there is a soft, fluctuating surface, of about one inch in diameter; compression here appears to give the child no inconvenience whatever. Occipital region perfectly natural.

Child grows rapidly, is playful, and begins to speak several words. The mother "*is sure*" that the deformity was caused by a fright from an ugly-looking man, during gestation.

NORTH WATERFORD, Maine, Dec. 25, 1855.

SELECTIONS.

EXPERIMENTAL RESEARCHES INTO ANIMAL HEAT IN THE LIVING AND THE DEAD BODY.

BY BENNET DOWLER, M. D.

(Continued from page 319.)

Diffusion of Physiological Heat.—Authors who copy from one another assert, that the temperature of the body diminishes in proportion to the distance from the heart. This is unquestionably a mistake in the recently dead body, in many instances at least, and will hardly hold good in its application to the living, as the following summary of several hundred observations made on one healthy person, before rising from bed, during eleven consecutive days, will perhaps show. These experiments, made towards the end of April and the beginning of May, 1844, were carried out daily under similar circumstances, between the hours of 4 to 6, A. M. The mean or average results alone will be stated:—Mean of the room, 74° ; of the hand, 98.25° ; of the tongue, 98.33° ; of the axilla, 98.4° ; of the perinæum, $98,3^{\circ}$; of the popliteal, 97.8° ; of the sole and inner ankle, 98.47° .

The following averages from tables carefully prepared during sixteen consecutive days of June, 1844, will serve to illustrate the comparative temperatures of the hand and of the urine, noted simultaneously, in the hot season of the year,—from which it will appear, that the difference between the pelvic centre and the hand is not very great.

The average external temperature of the mornings and evenings, at the time of the observations, was 83.2° ; average of the hand,

99.5 °; of urine, 98.37 °; whence then it appears that the hand averaged 1.13 ° more than the urine. But it is probable that the oscillations and depressions of temperature during exposures to cold, are much greater upon the surface and extremities, than in the centres. The high equable external temperature during these latter experiments tended, no doubt, to equalize results. There is, however, a source of error in these observations, which perhaps might be avoided; that is, the receiving glass (in this case a quinine bottle) might be first heated to the ordinary temperature of the body, before using it, so as to prevent or lessen the absorption of caloric by the vessel itself. This, though not wholly neglected, was not strictly carried into effect.

The following table, made in the manner above mentioned, in the same hot month, during seven days, is subjoined as a further illustration:

A. M.				P. M.			
Hour.	Air.	Hand.	Urine.	Hour.	Air.	Hand.	Urine.
8½	83¼ °	98¼ °	98¾ °	4½	85 °	100 °	99 °
10	89	99	98	8	79	100	97
5	76	98	97	4½	84	100	100
11	86	99	98½	8½	82	100	98
5	82	98	98	2½	88	98	100
9	84	98	98	5½	86	100	98
11	88	100	100	8½	82	98	97
6	78	99	99	6½	86	100	98
6	76	98	99	1	95	100	98
5	76	98	98	3	79	98	88
6	67	98	98	6½	84	100	89
10	86	99	98	8	80	100	98
MEAN,	83.39	99.45	98.5		83.75	99.5	98.37

Dr. Double, of France, and some others, say that the animal heat is depressed below the ordinary standard during sleep and in the morning. This latter, so far as I have experimented, is not accurate, unless by morning we understand the next hour after rising from bed. *A priori* it might be expected that caloric would accumulate in the body while lying enveloped in non-conductors, as blankets, and the motionless air, almost hermetically sealed by the bed-clothes during a winter's night. And such appears to be the fact.

Experiments, each lasting quarter of an hour, made in bed, on eleven consecutive days in the winter season, afforded the following results: hand, minimum, 92 °; the maximum, 100 °; the average about 98½ °, very near the same as the elbow, ankle, sole, instep, and femorals; the axilla being about 1 ° higher; the perineal, scrotal, inguinal, and popliteal regions, from 99 ° to 101 °, averaging 100.15 °.

The stomach, one great centre, is doubtlessly more free from diurnal oscillations, occasioned by external temperature, than the limbs and other circumferential parts.

In the most reliable experiments ever made upon the temperature of the stomach of man, are those by the late Dr. Beaumont, of the American army. These experiments, made in all seasons of the years 1829, '30, '31, '32, '33, in different latitudes from 38° to $44^{\circ} 40'$ N. upon Alexis St. Martin, a healthy young man, who had an external fistulous opening into his stomach, from a gun-shot wound in 1822. This opening not only permitted Dr. Beaumont for many years to make ocular examinations of the interior of the stomach in health and in sickness, in temperate and intemperate eating and drinking; but allowed him to introduce the thermometer and all varieties of diet, *ad infinitum*.

In this unparalleled case, Dr. B. could distinctly see the drinks and diets swallowed by St. Martin, pass through the cardiac orifice into the stomach.

The highest temperature of the stomach during health and repose, when empty, was $100\frac{3}{4}^{\circ}$; the lowest, 98° ; the mean, 100.13° ; during digestion, when full, highest, 102° ; lowest, 99° ; mean, $100\frac{1}{2}^{\circ}$; highest during or just after exercise, 103° ; lowest, $100\frac{1}{2}^{\circ}$; mean, $101\frac{1}{2}^{\circ}$. Once, and only once, did the temperature rise to 103° , which occurred after "unusually increased exercise," the natural temperature of the stomach being 100° F., according to Dr. Beaumont.

In one of Dr. Beaumont's experiments, the injection of a gill of water at 50° depressed the temperature of the stomach 30° ; the natural temperature did not return until more than half an hour afterwards.

The slight *sensibility* of the stomach to the extremes of cold and heat is surprising, ranging from 32° , the freezing point or that of melting ice, to 145° . The temperature at which coffee is drunk is, as I have often found by experiment, as high as this latter figure. Fluids at 32° or at 145° , if applied to the skin extensively would produce a violent shock, if not a speedy death.

In his late work on the skin and hair, Mr. Wilson sums up the heat of the various baths thus: temperate, 75° to 85° ; tepid, 85° to 95° ; warm, 95° to 98° ; hot, 98° to 105° . M. Velpeau says, "the ordinary temperature of the bath is from 26° to 29° R. (90° to 98° F.) In general, a bath becomes exciting and even rubefacient beyond 30° R. (100° F.)" (Oper. Surg. i, 228.)

Ratio of Refrigeration in Normal Urine.—During six days in June, the air having averaged at the times of the experiments (fifteen in number), 83.2° ; the urine, 98.6° . The average fall or refrigeration, every five minutes, was 95.15° , 92.32° , 90.5° , 88.15° , 87.5° , 86.72° , 85.57° , the point of departure having been, as we stated above, 98.6° .

An important sequel to these experiments would be, the comparison between the ratio of refrigeration of urine of the natural temperature, heated by animal caloric, morbid and normal, and the ratio of refrige-

ration of the same when re-heated by physical caloric, taking in each case similar points of departure. Experimental evidence upon the difference between animal and physical caloric, in this point of view, has been obtained by the writer from other experiments, some part of which will be subjoined after offering a few clinical remarks on animal heat.

Calor mordicans or *calor mordax*, communicating a peculiar pungent, tingling and disagreeable sensation to those touching febrile patients, of which the ancients have written much and the moderns not a little, is thus summed up by Galen:—

Fibrium. quæ a putredine oriuntur, maximum indicium est mordacitas et acrimonia caloris; quæ perinde ac fumus nares et oculos, sic ipsa erodere tactum videtur. Non statim ea qualitas, admota manu, discernitur, at per moram prædicta caliditatis species effertur ex penitioribus partibus.

Sir John Pringle says, "on feeling the pulse for some time (in jail-fever), I have been sensible of an uncommon ardor, leaving an unpleasant sensation on my fingers for a few minutes after. The first time I observed this, I referred it to the force of imagination; but I was assured of the reality by repeated experiments, and by the testimony of others, who, without knowing of my observation, had made the same remark. (Dis. Amy. 259.)

It is believed that the thermometer, still more than the touch, is a criterion adapted to determine whether there be any difference between febrile and physical heat, and their ratios of refrigeration, &c., &c.

Ratios of Refrigeration in Bodies heated by Animal and Physical Caloric.—These observations were made on nine consecutive days, ending April 23d. The weather was clear, and gave an average temperature of 70.55° at 8 A. M.; of 81.44° at 2 P. M.; of 71.5° at 8 P. M. The instrument was heated perhaps not always to the maximum of the hand, and gave 96° nearly, as its average point of departure; the mean fall of the quicksilver at the end of every five minutes was as follows:— 83.94° , 79.12° , 78.22° , 77.57° , 77.25° .

In a case of subacute pneumonia, the patient was bled one pound in an open gallery, the air of which was 83° ; the blood falling on the thermometer raised the mercury to 94° , but it began to fall as soon as the blood ceased to flow; in 12m. it fell to 92° ; in 10m. to 90° ; in 15m. to 87° ; in 25m. to 83° ; in 30m. to 81° ; in 15m. to 79° . The bowl of blood re-heated artificially to 95° , being placed in the same situation, the air being the same, the mercury fell in 12m. to 86° ; in 12m. to $83\frac{1}{2}^{\circ}$; in 15m. to 81° ; in 15m. to 79° , the stationary point, which was reached in about *one-half the time required to dissipate the animal caloric*. Next, a similar quantity of rain-water was treated as in the last experiment, and gave within one degree the same ratio of cooling as the latter.

In acute syphilis, a pound of blood just drawn gave 92° ; in 12m. after, 84° ; in one hour, 67° , the air being 62° . In a case of yellow fever, the blood raised the mercury in two minutes to 98° , at which it remained stationary two minutes, and then began to fall; in

another case the temperature of the blood was 100° as long as it was observed, that is, for ten minutes. These facts, though few, and perhaps inconclusive of themselves, assume a more important character when connected with many more decisive experiments, indicating *that morbid caloric differs, in some respects, from other kinds of caloric of the same temperature.*

Remittent, ending in intermittent Fever.—1845: Aug. 2nd; air at $6\frac{1}{2}$ A. M., 71° ; 8 A. M., 75° ; 4 P. M., 88° ; room, during the experiments which follow, 80° at $10\frac{3}{4}$ A. M., to 85° at $2\frac{1}{2}$ P. M. R. M., aged 19, resided in Mobile five years; in New Orleans two months. At the close of the experiments mentioned below, the hand gave a temperature of 101° ; the axilla $103\frac{1}{2}^{\circ}$; the bend of the arm, 102° . Recovery in two weeks.

The patient was bled from the arm 16oz.; the blood falling on the bulb of the thermometer, in a basin, caused the mercury to oscillate from 94° to $95\frac{1}{2}^{\circ}$; in three minutes after the blood ceased the flow, it coagulated throughout, enclosing the bulb, the mercury standing at 94° ; in 15m. it fell to $93\frac{1}{2}^{\circ}$; afterwards its declination was as follows, at the end of every five minutes precisely:— $92\frac{1}{2}^{\circ}$, 91° , 90° , 89° , 88° , 87° , 86° , 85° , 84° , 83° , 82° , $81\frac{1}{2}^{\circ}$, 81° , $80\frac{1}{2}^{\circ}$, 80° , 80° ; stationary. The basin containing the blood with the thermometer *in situ*, was placed for ten minutes in the sunshine, and then for ten minutes in and over warm water, which gave to the contained blood 96° at the bottom and 94° in the centre. In twenty minutes the centre reached 96° , the bowl having been wiped dry. The air of the room, as well as the external air, had in the meantime become warmer. The basin was placed in the same situation as during the preceding experiment, and as soon as the mercury fell to the former point of departure, that is 94° , the ratio of decline was noted at the end of every five minutes exactly, as follows:— 94° , 92° , 90° , $88\frac{1}{4}^{\circ}$, $87\frac{1}{2}^{\circ}$, $86\frac{1}{4}^{\circ}$, $85\frac{1}{4}^{\circ}$, $84\frac{1}{2}^{\circ}$, 84° , $83\frac{1}{2}^{\circ}$, 83° , 83° ; stationary.

The intelligent reader will perceive, that in the first experiment the large cold bowl must have absorbed much of the heat of the blood. Hence, judging *a priori*, it might be expected that the heat of the blood would have fallen rapidly, until the equilibrium had been attained. In the second experiment, the bowl and its contents, heated in the sun and in warm water very gradually, were pervaded with an equalized heat, and might be expected to refrigerate far more slowly; yet, the contrary result took place. The blood heated by animal caloric required one hour and a-half to reach the stationary point, while the blood reheated by physical caloric, reached the stationary point in fifty-five minutes. In the first condition the blood, though in a cold bowl, fell only half a degree in fifteen minutes; in the last case, in fifteen minutes the decline was nearly six degrees.

In view of the experiments to be presented hereafter, as well as those already submitted to the reader, it should be borne in mind that the main purpose of the writer, for the present, does not comprehend the explanation, deduction, and theory of the phenomena which have been, or may be related. Casual remarks, suggestions,

and reasonings, will, as heretofore, be noted as they arise, without systematic arrangement.

In *Western Journal of Medicine*, more than eleven years ago, I gave an experimental exposition of the fundamental facts, then not few, since vastly augmented, concerning my researches into animal heat, sufficiently broad to secure by documents and dates my claim to priority of discovery in this behalf, as will more fully appear. I have taken some facts which I published in that journal, for this paper, as well as the following speculation:

If we suppose the central, the great vital organs, to be as hot during life as they are found to be soon after death, the only wonder is that vitality should maintain its seat for a week or more under the positive changes that ought, by every law of caloric, to take place in the molecular arrangement of the tissues. Let us suppose the brain in life to be as hot as the thigh is found to be after death, that is 14° or 15° above health; the cerebral mass would necessarily expand, the fluids would dilate, and perhaps transude; compression would be the consequence, attended with convulsions, coma, and other effects incompatible with life. Suppose any other organ should become such a focus of morbid caloric only for a moment, would not each vessel from dilatation lose its healthy elasticity and cohesion, and thus pave the way to sanguineous congestion, admitting the blood to the part as effectually as the cupping glass does, when the pressure of the atmosphere is removed. In some local diseases, the lesions will afford an average alteration as great as fatal gun-shot wounds; as, for example, dysentery, consumption, and cancer. But in fever how much is unexplained! Is not morbid caloric the agent that eludes the knife of the anatomist? To say nothing of its directly deleterious, let us consider its mechanical effects, as above mentioned, upon the brain. After dilating the delicate vessels, and establishing a sanguineous congestion, death perhaps follows. The brain, as we have shown, falls sooner than other parts under the law of refrigeration; the cranium contracts; this tremendous force drives the blood down from the brain towards the warmer and more yielding centres of the trunk; perhaps a real meningeal apoplexy, without rupture, has disappeared. The febrile subject offers many instances of great vascularity of the vessels of the pia mater, without turgescency; the veins, especially, are found full but flattened as if by pressure. There can be no doubt that in the living, as well as in the dead body, foci of caloricity establish themselves in particular parts, sending off, not always in right lines, but in deflected currents, morbid heat to certain organs, passing by others. Thus the epigastrium and axilla may stand charged with a positive caloricity of 109° , while the organs of that part of the chest lying between these points shall be in a negative, or much lower state of temperature. I could muster serried columns of facts illustrative of some other points but I must omit them altogether.

So far as morbid caloricity can be identified as a cause of disease, we deal with a positive, not an imaginary agent, where the ground is not eternally slipping from beneath our feet. Albumen, which abounds

in the brain and fluids, coagulates at 160° ; hematosine, the coloring matter of the blood, at 149° ; and moderate increase of heat vastly augments the solvent powers of the serum over gelatine, so abundant in the body. The phosphorus in the body, were it uncombined, would burn in a heat less than 113° .

Admitting that the whole body be permeated with 10° or 15° of heat, and that it cannot render this heat latent, I ask again, is it wonderful that death should ensue? Which atom has not undergone a deleterious modification, or a new arrangement in its chemical, mechanical, and vital laws and relations? "Delaroche and Berger prove that animals, in chambers heated to 120° or 130° Fah., have their temperature raised 11° to 16° and die speedily." If, as some maintain, all lesions may be reduced to those of nutrition, caloric is an agent well adapted to play an important and fundamental part, not only diminishing the elementary cohesion of the tissues, but in debilitating all the organs, thereby favoring intertextural depositions, hypertrophies, softenings, hæmorrhagic and serous effusions, morbid secretions, engorgements, and other alterations, solid, liquid and gaseous.

Since the above was in type, the writer was present at one of the most formidable of all surgical operations, namely the resection of the inferior jaw, performed by the distinguished surgeon, Dr. Mercier, Sept. 12, 1855. Before the operation and at the commencement of the preparatory inhalation of chloroform, the patient's palm, which was somewhat cool to the touch, gave 96° ; the bend of the arm, $100\frac{1}{2}^{\circ}$; the pulse having been 84. Immediately after the removal of the morbid mass and before the sutures had been placed, (the pulse being 100) the temperature of the bend of the arm was still $100\frac{1}{2}^{\circ}$, although the patient's breathing had been irregular and impeded, owing to the blood, saliva, chloroform, and the mechanical obstructions in the mouth incidental to the operation. The pain of the operation and the movements of the patient were only partially controlled by the chloroform; the shock of the nervous and respiratory systems did not in the least impair the heat-producing process.

This note is subjoined as illustrative of the contingent question alluded to, page, 295, whether the pain of surgical operation may possibly modify the evolution of animal heat.

(To be continued.)

DIGITALIS IN HYDROCELE.—Cures of hydrocele are reported to have been made, by daily friction of the tumor with an ointment made of six parts of powdered digitalis, and thirty parts of lard, the patient wearing all the while, a suspensory bandage.

EDITORIAL AND BOOK NOTICES.

THE BOOK OF PRESCRIPTIONS: Containing 2900 prescriptions, Collected from the practice of the most eminent Physicians and Surgeons, English and Foreign. Comprising, also, a Compendious History of the Materia Medica of all Countries, Alphabetically arranged; and lists of the doses of all officinal or established preparations. By HENRY BEASLEY. Philadelphia: LINDSLEY & BLAKISTON. 1855.

The above is the title of a very closely printed volume of 309 pages, and is so full as to need little else, to give the reader a fair idea of the scope and object of the work.

The book also contains a list of abbreviations used in prescriptions, as well as a pretty full collection of Latin words and phrases, used for the same, with a proper translation into English. A brief description of the different articles of the Materia Medica is given, alphabetically arranged, and under each article, the various formulæ, or prescriptions, are given, of which it is the leading ingredient.

It is by no means an evidence of an independent and scientific practitioner, to see him eager in seeking after and copying particular prescriptions; but the young physician may often receive important suggestions, and be materially aided in forming habits of prescribing *secundem artem*, by consulting a work of this kind.

The older practitioner may also receive important hints, as well as have his rusty Latin brushed up, by such consultation. For all these purposes, we think this work one of the best of its kind.

TULLEY'S MATERIA MEDICA; OR PHARMACOLOGY AND THERAPEUTICS.

We are happy in being able to announce that the publishing of the above work has been resumed, and Nos. 13 and 14, Volume I., received.


Our space does not admit of noticing the entire contents of both numbers; suffice it to say that they have been taken up by the subject *Narcotics*, and the commencement of the Proem to the class *Erethistica*.

We hope that the learned author may have his health to go forward and complete what he has so ably begun, and that the publisher may have no further drawback from non-paying subscribers.

We cannot too strongly recommend it to the patronage of the profession, as we are satisfied no one will repent of his investment.

We hope soon to present our readers some interesting remarks upon the author, by one of his many pupils residing in this city.

W. B.

 We clip the *Report of Interments*, in the Three Cemeteries of this city, from the *Free Press*, and although it shows a mortality of 1104 out of a population of 51,000, yet we cannot but congratulate our citizens on the great degree of health they have enjoyed during the past year.

Making an allowance of 60 interments, for the months of November and December, in Mt. Elliott cemetery, we have a ratio of one death in every forty-five; and as the total amount includes many who have died in the surrounding towns, we can safely state the deaths in the city proper as one in fifty.

But few cities, if any, that are increasing in population as fast as Detroit, can show such a favorable report of the public health, especially when we take into consideration the large number of emigrants that are daily landed on our wharves during the summer season, many of whom are unable to proceed farther, through illness contracted in their journeying, and die in our midst. This immunity from disease, we can safely infer, is due to the extensive system of drainage, adopted and carried out by the authorities, and which we hope to see yet more widely extended.

W. B.

INTERMENTS DURING 1855.—The following shows the number of interments, &c., in the several cemeteries of this city, during the year 1855:

ELMWOOD CEMETERY.

	MALES.	FEMALES.	TOTAL.
January	21	10	31
February	3	11	14
March	15	13	28
April	7	11	18
May	8	10	18
June	4	8	12
July	20	19	39
August	29	30	59
September	19	19	38
October	17	12	29
November	13	10	23
December	10	6	16
Total	166	159	325

PLACE OF NATIVITY.

United States - - - -	240	Prussia - - - -	2
England - - - -	27	France - - - -	1
Germany - - - -	19	Sweden - - - -	1
Ireland - - - -	13	Not reported - - - -	3
Scotland - - - -	12	Total - - - -	325
Canada - - - -	7		

AGE.

Under 1 year - - - -	111	50 to 60 - - - -	22
1 to 5 - - - -	61	60 to 70 - - - -	15
5 to 10 - - - -	11	70 to 80 - - - -	4
10 to 20 - - - -	16	80 to 90 - - - -	3
20 to 30 - - - -	36	Not reported - - - -	4
30 to 40 - - - -	26	Total - - - -	325
40 to 50 - - - -	16		

MT. ELLIOTT CEMETERY.

	MALES.	FEMALES.	TOTAL.
January - - - -	26	17	43
February - - - -	21	16	37
March - - - -	19	20	39
April - - - -	17	15	32
May - - - -	16	17	33
June - - - -	25	17	42
July - - - -	41	30	71
August - - - -	38	23	61
September - - - -	40	39	79
October - - - -	32	24	56
November (not reported) - - - -	—	—	—
December (not reported) - - - -	—	—	—
Total - - - -	275	218	493

PLACE OF NATIVITY.

United States - - - -	282	England - - - -	2
Ireland - - - -	95	Italy - - - -	1
Germany - - - -	42	Scotland - - - -	1
Canada - - - -	23	France - - - -	1
Belgium - - - -	3	Not reported - - - -	40
Africa - - - -	3	Total - - - -	493

AGE.

Under 1 year - - - -	155	40 to 50 - - - -	21
1 to 5 - - - -	151	50 to 60 - - - -	12
5 to 10 - - - -	14	60 to 70 - - - -	13
10 to 20 - - - -	20	70 to 80 - - - -	5
20 to 30 - - - -	50	80 to 90 - - - -	5
30 to 40 - - - -	47	Total - - - -	493

CITY CEMETERY.

	MALES.	FEMALES.	TOTAL.
January - - - - -	24	8	32
February - - - - -	9	4	13
March - - - - -	7	7	14
April - - - - -	6	5	11
May - - - - -	13	4	17
June - - - - -	12	11	23
July - - - - -	19	11	30
August - - - - -	40	20	60
September - - - - -	27	14	41
October - - - - -	8	9	17
November - - - - -	13	6	19
December - - - - -	4	5	9
Total - - - - -	182	104	286

PLACE OF NATIVITY.

United States - - - - -	149	Scotland - - - - -	4
Germany - - - - -	68	Canada - - - - -	1
England - - - - -	9	Holland - - - - -	1
Ireland - - - - -	8	Not reported - - - - -	46

AGE.

Under 1 year - - - - -	108	40 to 50 - - - - -	17
1 to 5 - - - - -	55	50 to 60 - - - - -	6
5 to 10 - - - - -	9	60 to 70 - - - - -	2
10 to 20 - - - - -	12	70 to 80 - - - - -	1
20 to 30 - - - - -	27	Not reported - - - - -	10
30 to 40 - - - - -	39	Total - - - - -	286

RECAPITULATION.

MONTHS.	ELMWOOD.			M. ELLIOTT			CITY.			WHOLE No.		
	MALES.	FEM'S.	TOTAL.	MALES.	FEM'S.	TOTAL.	MALES.	FEM'S.	TOTAL.	MALES.	FEM'S.	TOTAL.
January ..	21	10	31	26	17	43	24	8	32	71	35	106
February..	3	11	14	21	16	37	9	4	13	33	31	64
March....	15	13	28	19	20	39	7	7	14	41	40	81
April.....	7	11	18	17	15	32	6	5	11	30	31	61
May.....	8	10	18	16	17	33	13	4	17	37	31	68
June.....	4	8	12	25	17	42	12	11	23	41	36	77
July.....	20	19	39	41	30	71	19	11	30	80	60	140
August ...	29	30	59	38	23	61	40	20	60	107	73	180
September	19	19	38	40	39	79	27	14	41	86	72	158
October...	17	12	29	32	24	56	8	9	17	57	45	102
November.	13	10	23	—	—	—	13	6	19	26	16	42
December .	10	6	16	—	—	—	4	5	9	14	11	25
Total ...	166	159	325	275	218	493	182	104	286	623	481	1104

PLACE OF NATIVITY.

United States - - -	671	Africa - - - - -	3
Germany - - - - -	129	Prussia - - - - -	2
Ireland - - - - -	116	France - - - - -	2
England - - - - -	38	Sweden - - - - -	1
Canada - - - - -	31	Italy - - - - -	1
Scotland - - - - -	17	Holland - - - - -	1
Belgium - - - - -	3	Not reported - - -	89

AGE.

Under 1 year - - -	374	40 to 50 - - - - -	54
1 to 5 - - - - -	267	50 to 60 - - - - -	40
5 to 10 - - - - -	34	60 to 70 - - - - -	30
10 to 20 - - - - -	48	70 to 80 - - - - -	10
20 to 30 - - - - -	113	80 to 90 - - - - -	8
30 to 40 - - - - -	112	Not reported - - -	14

The population of the city exceeds 51,000.

CIRCULAR.

AMERICAN MEDICAL ASSOCIATION.

The Ninth Annual Meeting of the American Medical Association will be held in the CITY OF DETROIT, Michigan, on Tuesday, May 6th, 1856.

The secretaries of all societies and other bodies entitled to representation in the Association, are requested to forward to the undersigned correct lists of their respective delegations, *as soon as they may be appointed*; and it is *earnestly* desired by the Committee of Arrangements, that the appointments be made at as early a period as possible.

The following extracts are from Article 2d of the Constitution:

“Each local society shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half this number.

“The Faculty of every regularly constituted Medical College or chartered school of medicine, shall have the privilege of sending two delegates. The professional staff of every chartered or municipal hospital, containing a hundred patients or more, shall have the privilege of sending two delegates; and every other permanently organized medical institution, of good standing, shall have the privilege of sending one delegate.

“Delegates, representing the Medical Staff of the United States

Army and Navy, shall be appointed by the Chiefs of the Army and Navy Medical Bureau. The number of delegates so appointed shall be four from the army medical officers, and an equal number from the navy medical officers."

The latter clause, in relation to delegates from the army and navy, was adopted as an amendment to the Constitution, at the meeting of the Association held in New York, in May, 1853.

* * Medical Journals, &c., please copy.

WILLIAM BRODIE, M. D., Detroit, Mich.,
One of the Secretaries.

MICHIGAN DENTAL ASSOCIATION.—At a convocation of the Dentists of Michigan, in the city of Detroit, on the 9th day of January last, an association was organized having for its object the advancement of Dental Science and the cultivation of friendly relations between its members.

The following officers were elected to serve for the ensuing year:

Dr. C. F. Knowlton, of Detroit, President.

" A. T. Metcalf, of Kalamazoo, V. President.

" F. M. Foster, of Jackson, Rec. Sec.

" L. C. Whiting, of Detroit, Cor. Sec.

" H. Benedict, " Treas.

" Wm. Cahoon, of Pontiac,

" C. B. Porter, of Ann Arbor,

" F. M. Foster, of Jackson,

" L. C. Whiting, of Detroit,


" F. D. Ingersoll, Monroe,

} Ex. Com.


The association then adjourned to meet in the city of Detroit on the first Wednesday of January, 1857.


It is with pleasure we announce the above to our readers, as we hold it to be a cardinal principle that the interchange of opinions and the friendly relations that are induced by co-operation of individuals in the form of societies or associations, when organized for the purpose of advancing science, result, not only in practical benefit to their members, but upon the community among whom they individually reside. We hope therefore and express our friendly wishes for the Society's prosperity, as we believe much good will be thereby attained.


We shall be happy at all times to receive and insert in our pages, any communications on the subject of Dentistry, whether Practical or Theoretical, reserving to ourselves the usual prerogatives of Editors.

 We would call the attention of the Medical Profession of this State, to the meeting of the *State Medical Societies*, which will take place in the city of Ann Arbor in March next, the date of which will appear in our March No. We hope arrangements will be made by every individual Physician, so that he can be present, and especially so, in view of the meeting of the American Medical Association in this city in May next.

ED.


 We would respectfully inform our subscribers that we have appointed Mr. Charles Brodie, our agent, to collect, and receive subscriptions for the Journal, and as he will start on his tour by the 3rd of this month, (February) we hope all will be ready to respond to his call.

 We would call the attention of Dentists who may see the *Peninsular Journal of Medicine*, to the article headed Michigan Dental Association in the present No. in the hope that many will be induced to subscribe. See 3d page of Cover for Terms.

 At a sitting of the *Supreme Court* of the State of Michigan, in this city, (Detroit) January 22d, 1855. Present a full bench.

A motion was made by C. I. Walker for the issuing of an alternative *mandamus* compelling the Board of Regents of the University to appoint a Professor of Homœopathy according to the act of the Legislature, creating the chair, or to show cause why the same is not done.

The case is held under advisement, and also for further authorities in the case.

 Since writing the above, we are informed that a *mandamus* has been granted.

PRESENTATION.—On Tuesday afternoon of this week, at the close of Prof. Ford's lecture before the Medical Class, he was presented in behalf of the Class, by one of its members, with an elegant Study Chair. The appropriate presentation address was responded to in a feeling manner by Prof. Ford. The beautiful gift is certainly an evidence of the regard of the donors, and plainly tells that the recipient has been faithful in his instructions to the Class. The Chair is of Rose Wood, and is upholstered in the richest and neatest style. A silver plate upon the *face of the back* is inscribed,

"To Prof. Ford, from the Medical Class of the University of Michigan, 1855-6."—*Mich. Argus, of Jan. 25th.*

FORCIBLE DELIVERY.—In the proceedings of the Boston Society for Medical improvement, published in the Boston Medical and Surgical Journal, Dr. Stetson, of Quincy, Mass., reports a case of dropsy in both mother and child. The latter being dead, the skull was perforated and relieved of its contents, and the head delivered by the crotchet, but with difficulty. The shoulders could only be moved by powerful traction, by means of a handkerchief tied to the head, and by such efforts as made it necessary to secure the body of the mother by corresponding counter-traction. Twenty grains of ergot were given just before delivery, but only “in order to insure a more prompt contraction of the uterus,” and the expulsion of the placenta, effects which were secured. Dr. Jackson spoke of the astonishing amount of force in the way of traction which is often borne by parturient women, and also by the lower animals. He has known the tractive power of six men to be successfully used in the delivery of a cow; and we have seen the tractive power of a horse applied for the same purpose. Dr. Storer remarked that such forcible traction must always be more or less injurious to the mother, and suggested that it might be better in cases of the death of the child to practice dismemberment. Dr. Cabot thought that dismemberment being so shocking to friends and attendants, should be avoided if possible. The editors suggest, that the course to be pursued should depend upon the condition of the mother; but that violent and very long-continued efforts at extraction of a *dead* child, can hardly be justified in any case. It is better that the few attendants necessary to be present, should witness the shocking spectacle, than that the life of the mother should be endangered.—*Memphis Med. Rec.*

FRACTURES OF THE FEMUR.—Velveau says that after fractures of the femur, there is no limping unless the shortening exceeds three-fourths of an inch; and the same is true if the shortening occurs in the tibia. The reason is, that the pelvis inclines towards the shorter limb, and thus compensates for the deficiency in length. In speaking of the various contrivances for dressing the fractured femur, he remarks, that most of them fail to obviate the shortening, and produce eschars ankylosis, or troublesome arrests of the circulation. This is the price that is usually paid for the employment of these complicated machines, and a shortening of a quarter to three-quarters of an inch is not avoided after all. The simplest apparatus that will maintain the adjustment of the fractured femur, so that union may take place with shortening of only half an inch, is the best.—*Memph. Med. Rec.*

THE PENINSULAR
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AND THE COLLATERAL SCIENCES.

VOL. III.

MARCH, 1856.

NO. IX.

ORIGINAL COMMUNICATIONS.

ARTICLE I.

Translated from Archives Generales, December 1855.

Observations upon Hemorrhages from detachment of the Placenta inserted on the Cervix Uteri; Considerations on the Pathogenic and Therapeutics of that accident.

BY DR. LEGROUX, PHYSICIAN OF THE HOTEL DIEU.

The hemorrhage, consecutive to the insertion of the placenta on the cervix uteri, has been for many years the subject of communications to many learned societies, of the reports and discussions upon them, and of many papers in the periodical medical journals.

Of these the most important as well as most complete is the report made to the Academy of Medicine (July 6th, 1852) by M. Depaul, upon a case of parturition complicated with hemorrhage, communicated by M. Dr. Charles Gerard.

More recently, the medical journals have copied from the *Journal of Medicine and practical Surgery* the clinical lectures of Professeur P. Dubois, upon the same subject, which may be regarded as the complement of the report of M. Depaul.

Such imposing authorities induced me for a long time to hesitate in producing the result of my own personal observation, to advance new views on the subject. Indeed, if my views be correct, if I have

justly appreciated the facts, the generally admitted doctrines of the pathogeny of this hemorrhage, which are in conflict with practice, must be abandoned and another substituted, which by harmonizing the theory and practice shall yield a mutual support. It will be necessary, if I am not deceived, to revise and modify some of the practical precepts of the masters of the art, and to introduce a new therapeutic element in their midst. The temerity of the attempt will be justified by the hope and desire of rendering service to humanity.

In the outset I must recall the dominant pathological doctrines regarding this hemorrhage.

"It is generally admitted that the hemorrhage becomes more abundant as the labor advances, since the detachment of the placenta becomes greater; that whatever tends to augment the contractions of the uterus, necessarily increases the hemorrhage; and that as it either ceases or declines only in the interval of the pains, the most efficient means of arresting it are those that tend to suspend the contractions of the uterus." (Gardien, 2d edit., t. II., p. 404.)

And further (p. 406) it is stated *that the loss sustained by the detachment of the placenta from any other point of the internal surface of the uterus augments when the uterine contractions are suspended, and ceases when the pains are energetic.*

The reason of this difference is that in this case the contractions of the uterus close the orifices of its vessels, while in the former case the contractions of the fundus and corpus uteri separate, in forcibly dilating the cervix, the attachments of the placenta, the disrupted vessels of which remain patent.

The hemorrhage, according to this theory, is placental. The objections to it are numerous, but proposing to return to its consideration hereafter, I omit it here. By the side of the opinion of Gardien let us place those of Desormeaux and Prof. P. Dubois. (Dict. de Med.)

"The blood flows more abundantly during the contraction of the uterus, (referring to placenta previa) while in other hemorrhages the flow is suspended by the constriction of that organ. In the first case the blood is expressed from the vessels of the cervix and even from those of the placenta by the traction upon the circumference of the uterine orifice, and *by the pressure of the fœtus upon the placenta.*"

This view, which although attributed to M. Duparque is adopted by Desormeaux, M. P. Dubois and M. Depaul, undoubtedly differs very slightly from that proposed by Gardien; the latter attributing the hemorrhage to the placental vessels rendered patent by the increasing detachment of the organ, the former while deriving the he-

morrhage from the utero-placental vessels introduces an other element, viz. a pressure on the placenta. Both, however, agree in recognizing the contractions of the uterus as the efficient cause of it.

The hemorrhage then bears a direct proportion to the progress of the labor, and the hemostasis is subordinated to the suspension of parturition. Hence is deduced the practical maxim, that to arrest the hemorrhage we must calm the excitement of the uterus. But as it is necessary that the labor should be completed, we are directed, *contrary to theory*, to stimulate the uterus with ergot, to effect the delivery as speedily as possible. But we here necessarily find ourselves in a dilemma.

If, in accordance with the practical view of the subject, we excite the uterine contractions, the danger of a profuse and destructive hemorrhage becomes imminent.

If, on the other hand, we endeavour to meet the theoretical indications by moderating the pains, we may succeed in diminishing the hemorrhage, but, as we shall presently see, a progressive anæmia is permitted to supervene, which is almost uniformly fatal.

I hope to be able to replace this theory by one, which, in reciprocally subordinating the hemostasis and the uterine action, will permit us to provoke the most energetic contractions without fear or hesitation.

In support of this theory I shall first adduce some facts in order to determine the precise source of the hemorrhage.

1st Obs.—A female, about 30 years old, entered the hospital Beaujon early in April 1852. She had been ill some 15 days. Being near the close of gestation, she had lost much fluid and coagulated blood; during this period the fœtal movements had ceased. The hemorrhage continued after her admission, but not immoderately; her robust and vigorous aspect had given place to some degree of paleness and slight debility. The developement of the uterus corresponded with full term, the neck, dilated to permit the introduction of the point of the finger, was in all respects normal. Directed to assume a horizontal position, and ordered cold styptic enemata with astringent drinks.

Under this treatment the hemorrhage ceased for several days, then without apparent cause it recurred more profusely than before, inducing a sense of weakness and annihilation.

Had a consultation the next day with M. Robert, surgeon of the hospital. Examined by the speculum and by the touch we discovered an elongation and a prominence of the posterior lip of the cervix. The fingers penetrating the orifice impinged upon a spongy substance.

The hemorrhage had ceased. Although very pale and weak she supported the examination both in the erect and horizontal posture without much suffering. It was deemed proper to provoke uterine contractions by the use of ergot, but towards evening, before the medication had been commenced, she expired suddenly and without further loss of blood—in a fit of syncope.

Autopsy.—Complete insertion of the placenta over the cervix, but ascending higher on the posterior than on the anterior wall. It was softened, of a pale red and brownish colour, decomposed but without fetor, and easily detached. Fœtus in process of decomposition; no lesion of the viscera furnished an explanation of the unexpected death.

The decomposition of the placenta consecutive to the previous death of the fœtus, forbid the hypothesis of a placental source of the hemorrhage, especially in the later period; if in the first stages it might have been utero-placental, it must surely have been exclusively uterine after the death of the fœtus.

We may here observe a fact, which indeed is common to all cases of placenta previa, that the hemorrhage commences long before the uterine contractions, which the theory assumes to play a very important part in the production of that accident.

The following observation is an abstract from the history of a case carefully observed at the Hospital St. Antoine in 1844, by my learned friend and colleague Dr. Bernutz, by whom it was obligingly communicated to me.

A female in the 44th year of her age was in the eighth month of her third gestation. She had menstruated during the first four months, but had ceased to do so from that period. Near the eighth month, according to her calculation, after having received some ill treatment from her husband, a somewhat profuse hemorrhage occurred, which was repeated several times during the three following days, but which ceased upon the supervention of a prolonged syncope; on the next day she came on foot to the hospital. Recumbency ordered, is calm, pallid, with no hemorrhage and without labor pains, os uteri dilated to size of a shilling and filled with a spongy substance communicating to the finger a velvety sensation. During the night profuse hemorrhage, pallor, prolonged sighing, epigastric pains, pulse feeble and frequent, *no uterine contractions*, same state of the cervix. Cold vaginal injections; remove the coagulum from the canal.

Hemorrhage ceased, the patient revived under the influence of some wine and felt better. A tampon was employed, but it appeared to give rise to epigastric pains and nausea; she took an infusion of 30

grains of ergot in 3 doses ; soon great agitation supervened, she became delirious and fell from her bed. When restored to her position was more calm, but the pallor increased, the pulse became insensible, and she sank into a state of irrecoverable syncope.

Autopsy 30 hours after death.—Cadavre had suffered no change. Heart sound, cavities filled with dark and fibrinous coagula.

The uterus contained a full-term foetus in a state of incipient decomposition. The placenta, although not quite centrally attached over the cervix, yet completely closed the orifice. The os uteri about the size of a half dollar, it was filled with the superior portion of lint composing the tampon, which was scarcely tinged with blood. No open orifices of vessels, from which the hemorrhage could have issued, were visible.

The anatomical conditions of the placenta were not reported in this case. It is probable, however, that the utero-placental circulation was more or less completely interrupted after the death of the foetus, for, as M. Moreau remarks, the foetal circulation being arrested, the blood in the uterine veins ceases to flow and coagulates ; the vessels then contract and may even become obliterated. The uterus now receives only nutritive blood, having lost the stimulus that previously attracted a more abundant flow, and hence although the vessels be lacerated by the separation of the placenta no considerable hemorrhage follows it.

M. Cazeau regards this view as furnishing a rational explanation of those cases in which the cervix becomes dilated without the super-vention of hemorrhage.

But theory apart, the fact with which we are most interested, is the more or less complete suspension of the utero-placental circulation after the death of the foetus. If in such a case the hemorrhage persists, the uterus alone can be its source, as the placental circulation has already ceased.

In the cases above cited death was not the direct and immediate, but the secondary effect of the hemorrhage ; in the second, the series of accidents to which she had been subjected, had contributed to the result ; but in the first it took place unexpectedly and without previous extreme exhaustion.

I deem it important here strongly to insist upon the dangers of the anæmic condition induced by repeated losses of blood ; dangers that do not cease to menace the patient long after the hemorrhage has ceased, and to draw attention to the gravity of those obstetrical operations which necessitate that condition.

A year since, a female who had been for several hours in labor, was brought, on a bed, into the Hotel Dieu, at the hour of my visit. An incessant hemorrhage, arrested for the moment, had rendered her pale and exsanguine. The touch discovered a dilatation of more than two inches; a spongy substance, which was evidently the placenta, filled the os uteri; her great exhaustion rendered the result of a renewed hemorrhage extremely doubtful. The urgency of the case induced me to attempt delivery. Contrary to my expectations, I found, on introducing the extremities of my fingers into the os uteri, that it was impossible to dilate it.

I had hardly made a slight attempt, when she became extremely faint, and seemed about to expire. Instantly suspending the manœuvre, I prescribed tonic drinks, wine and broth, in repeated small doses, with sinapisms; and directed an immediate resort to the tampon, on the slightest indication of recurrence of hemorrhage.

Notwithstanding the continued employment of these means, and without farther loss, the exhaustion became more and more decided, and she succumbed a few hours afterwards.

The autopsy proved the correctness of our diagnosis. No coagulum was found between the uterus and placenta, to explain the hemostasis, nor could we discover, on the walls of the uterus, from which the placenta was detached, the patent orifices of vessels from which the blood issued.

Could any thing else have been done for this female, in the state of exhaustion induced by the profuse hemorrhage? A forced delivery would evidently have proved immediately fatal, since even the introduction of the hand into the vagina produced a profound sense of sinking. Should the placenta or the membranes have been perforated?—But there were no uterine contractions, and the abdominal void left by the uterine retraction when evacuated, would have intensified the state of syncope. I have since regretted the neglect of the use of the tampon, as it might have excited pains, and contractions, and thus become a vital stimulus.

In this case, too, death supervened several hours after the cessation of the hemorrhage, as a secondary result of that accident.

I observed the same thing occur after delivery of a lady, visited in consultation with two professional friends. She was much exhausted by repeated hemorrhages during a protracted labor. When I arrived the flow had ceased. A spongy mass filled the dilated os uteri. The tenuity and dilatation of the cervix, and the great laxity of its tissues, were such as to facilitate immediate version and delivery.

The operation also seemed clearly indicated. It was performed without the least difficulty, occupying scarcely a minute. A sense of anguish, and of sinking, as if the heart was being torn out, was felt during the extraction of the infant, but no hemorrhage followed the delivery. Yet notwithstanding every effort was made, no reaction took place, and she expired in a few hours afterwards.

During the last year, in two cases of placental presentation, artificial delivery was performed in my obstetrical wards, by M. Danyan, to whose care these cases were specially committed. They came under my care the day after their delivery, for medical treatment.—They were then in a state of great weakness and extremely anæmia; and succumbed in two or three days after the operation.

The simple extraction of a retained placenta, may give rise, in a case of hemorrhagic exhaustion, to the same sense of sinking and annihilation.

On one of my morning visits I found a young accouchie nearly bloodless, postpartum hemorrhage from inversion of the uterus having occurred; but the placenta was still retained. I deemed its extraction urgently necessary, and relied, for the safety of the patient, upon the uterine contractions, excited by the presence of the hand in utero. * But the extraction of the placenta, rapidly and easily performed, was followed by a profound sense of sinking, which speedily terminated in death.

In that state of extreme anæmia, the death of the patient was obviously near and inevitable; still the inquiry, whether it was not somewhat accelerated by the operation, pressed itself on my attention.

From these and other similar facts, that might be added, we may deduce the following conclusions, viz: 1st. That the anæmia induced by repeated hemorrhages, and which may not inappropriately be denominated *acute*, renders the patient, even when not extreme, liable to sudden and unexpected death; standing, in this respect, in contrast with the chronic form of the disease, induced by unfavorable hygienic conditions; and is, therefore, calculated to call forth the liveliest solicitude of the accoucheur.

2d. That under these circumstances, the slightest obstetrical operation may produce a fatal disturbance in the system. This important fact must always be born in mind, when deciding on the methods of fulfilling the indications.

After this digression, which seemed to me to possess some practical interest, I propose to adduce some facts that ought, in my opinion, to

establish the relation between the hemorrhage and the uterine contractions.

3d Case. Mme. Lemasson, aged 28 years, living in St. Antoine street, had reached the eighth month of her eighth pregnancy, when she was attacked with a hemorrhage which threatened to induce premature labor.

Twice the hemorrhage was promptly arrested by a V. S., which was indicated by the plethoric condition, aided by the horizontal posture and the cold applications to the hypogastrium and thighs. But the third recurrence of the accident, before parturition, was but partially suppressed, and became more abundant at the beginning of labor.

The presumption of a placental presentation was confirmed as soon as the os uteri was sufficiently dilated to permit a careful application of the touch. A spongy and lobulated mass covered the orifice, of too great thickness to permit me to distinguish the foetus. The hemorrhage increasing, soon became so profuse as to threaten immediate dissolution.

The os uteri, which early in the labor had acquired the diameter of five or six centimetres, (2 inches,) ceased to dilate, although the pains were frequent and severe.

Carrying the finger as far as possible between the placenta and the internal surface of the cervix, on the left side, from which alone the placenta was detached, the following facts were ascertained:

During the uterine diastole, the finger penetrated with facility between the separated parts, and then the blood gushed forth over it into the vagina.

During the systole, the finger was driven from the cervix, by the membranes now becoming tense and closely applied to its surface; the hemorrhage ceased, but the blood received by the vagina during the diastole, was now expelled by the pressure of the uterus.

These facts, ascertained by careful and repeated observations, have fully convinced me that the *true vascular hemorrhage* was diastolic; that only the external flow, the *apparent hemorrhage*, was systolic, although coincident with true hemostasis.

That the cessation of the flow was evidently due to the firm pressure made during contractions, by the tense membranes on the denuded surface of the cervix uteri.

To prevent a recurrence of the hemorrhage during the uterine diastole, this condition must be maintained. The vertical position afforded the only means of fulfilling the indication. Notwithstanding the temerity of the act, I immediately adopted it. But so great was

her debility, that in order to sustain her in that posture, it was necessary to place a vigorous person on each side, while I supported her feet and knees with my own.

She had scarcely assumed this posture when, as if to frighten and deter me from the further prosecution of the experiment, a copious discharge of liquid and coagulated blood took place from the vagina. But the alarm was of short duration, for the hemorrhage *ceased completely*, on the passage of the clot.

I satisfied myself by the touch that the weight of the ovum was sufficient to maintain the separated membranes in close contact during the uterine quiescence. The pains became longer and more energetic in consequence of this change of posture. Notwithstanding this effect, the dilatation of the cervix made no progress, its orifice was occluded by a mass of placenta, which prevented all hemorrhage, equally in the intervals of the pains and during their presence. What prevented the dilatation of the cervix? It was unquestionably due to the circumstance, that the centre of the placenta alone had become detached, while the peripheral portions were yet firmly adherent.

Having failed to reach the membranes by passing the finger along the left side of the cervix, I discovered an interlobular fissure, through which, by lacerating the tissues with the nail, the membranes were ruptured during a pain. The orifice in the placenta was much enlarged by the gush of water, and the head immediately engaging in the os, folded back the placenta on the right side. A few pains accomplished the delivery without further accident. *The fetus was live-born and in good condition.*

The placenta was lacerated to the depth of two inches, from a point on the circumference. In the vicinity of this fissure there existed a large and smooth white spot, presumed to be the cicatrix of a previous separation.

The convalescence was finally happy, although interrupted in its course by several accidents.

(*To be continued.*)

WHAT WE KNOW AND WHAT WE DON'T KNOW.—You are such a skilful anatomist, a patient once said to Petit, that you should be able to cure all diseases. That is true, replied the celebrated physician. Unhappily, my brethren and I resemble the errand boys of Paris, who know all the streets perfectly, but are ignorant of what is going on in the houses.

ARTICLE II.

A Monograph on Mental Unsoundness.

BY FRANCIS WHARTON.

A copy of this book, which comes to us with a very unpretending title page, has been placed in our hands for perusal, by a friend of the writer. We learn from the author's advertisement that he had associated with himself in this enterprise Dr. Moreton Stille, of Philadelphia (since deceased), and that this monograph, is the first of a series, designed, when completed, to constitute a treatise on Medical jurisprudence. It is written in a clear, sententious style, and bears internal evidence of a careful study of his subject by the writer, which he has so managed, as to leave an impression upon the mind of his reader, that the author has not undertaken a labor above his ability to perform.

The work, thus far, consists of two chapters, in the first of which, "Mental unsoundness in its legal relations," is concisely considered, beginning with Idiocy and ending with Delirium Tremens.

When the difficulty of constructing a definition of insanity, which shall meet every possible contingency that may arise in the legal, moral and medical treatment of the subject, is taken into view, the author has wisely, perhaps, postponed the attempt, and entered at once upon the following inquiries :

I. What degree of unsoundness invalidates a contract or will.

II. What is necessary to be proved, in order to deprive a party of the management of his estate.

III. What degree of unsoundness avoids responsibility for crime.

IV. How far intoxication affects responsibility for crime.

In the discussion of the numerous subordinate questions which grow out of these more general divisions, as before intimated, there is no effort made to erect an infallible standard, by which to judge of the degree of mental unsoundness in particular cases, so as to determine unerringly, the rights of parties in relation to property and personal freedom, or their responsibilities in relation to acts may or may not be criminal, as the individual is found to be of sound or unsound mind ; but due allowance is made for the natural diversities which exist in human character, for the influence of organism over the propensities of men, and for the various circumstances which may affect our psychological entity irrespective of our physical abnormalities.

Drunkenness or that sort of madness, which Lord Hale terms *dementia affectata*, receives a due share of attention. This is eminently proper in a country like ours, where the vice is so prevalent and the form of insanity, to which it gives origin is of such frequent occurrence, as almost to be regarded an American disease.

Whilst we agree with the author, that *delirium tremens* affects accountability for crime, that drunkenness is entitled to be considered, when determining the intent of the individual who commits a crime, increasing his responsibility if the intoxication enters into the design, and diminishing it if it bears an accidental relation to the act of violence committed, whilst he is thus, *voluntarius dæmon*, I think, there should be some mode not yet prescribed by law, of measuring the crime of drunkenness and of graduating penalties adopted to its varying degrees of enormity.

In the second chapter, mental unsoundness is considered psychologically. This constitutes the largest and most interesting part of the volume, containing, as it does, the arrangement of Doctor I. Ray, which is essentially that of Mr. Esquirol, the classification of Messrs. Flemming and Ellenger, and a sketch of the theories of insanity, which are designated by the partisans to these different views, *the psychic, somatic* and *psycho-somatic*, according as they may have adopted the opinion either that the mind itself is the seat of disease, with which its corporeal envelope is made to sympathize, or that it originates in some abnormality of bodily development, such as defective organism or excessive growth, diminished or exalted innervation; or else that these conditions of mind and body concur in originating and promoting the growth of mental unsoundness.

Although the arrangement of the various forms of mental alienation, made by M. Esquirol, and modified by Dr. Ray, has been followed by Mr. Wharton, he, by no means, adopts the pathology of the author of *The Medical Jurisprudence of Insanity*, who apparently embraces the ontological notions of Gall and Spurzheim, including their peculiar opinions on the anatomy of the brain, and from thence comes invariably to associate healthy mental phenomena, with peculiar forms in physical structure, and mental aberrations with the pathological changes which such structures are liable to undergo when unfavorably impressed.

We had believed that a mortal wound was inflicted some years ago upon phrenology, by M. Flourens,* whose vivisections showed that one cerebral eminence after another might be sliced away,

* I refer from memory to Dr. Meigs' translation of M. Flourens.

scarcely leaving the corpus callosum, and yet the animal retain the possession and the power to controul the mental faculties supposed to reside therein. But was well aware that with enfeebled powers it still held a place in the minds of a certain class of thinkers; unable, however, to conceive of the kind of vitality with which it must be endowed to enable it to survive, even in an Insane Asylum, the dissection made of it, by Sir Benjamin Brodie, an account of which is given in an essay, published by that gentleman, in 1854, entitled Psychological enquiries, &c., and from which we make the following extracts, in my judgment, conclusively destructive to the phrenological phase, of the somatic theory of insanity:

“Now there are two simple anatomical facts which the founders of this system have overlooked, or with which they were probably unacquainted, and which of themselves afford a sufficient contradiction of it.

“1st. They refer the mere animal propensities, chiefly to the posterior lobes, and the intellectual faculties to the anterior lobes of the cerebrum. But the truth is that the posterior lobes exist only in the human brain, and in that of some of the tribes of monkeys, and are absolutely wanting in quadrupeds.

“2nd. Birds have propensities and faculties in common with us, and in the writings of phrenologists many of their illustrations are derived from this class of vertebral animals.

“In the bird’s brain, what appears to a superficial observer to correspond to these hemispheres (the human), is found, on a more minute examination, to be apparently the *corpora striata* developed to an enormous size; that which really corresponds to the cerebral hemispheres being merely a thin layer, expanded over their upper surface, and presenting no appearance of convolutions.

“It is plain then, that there can be no phrenological organs in the bird’s brain, corresponding to those which are said to exist in the human brain, or in that of other mamalia. Yet birds are as pugnacious and destructive, as much attached to the localities in which they reside, as any individual among us.”

Creditable, as we think, the execution of this monograph to be as a whole to the two professions engaged in its composition, there is no part of it that commends itself more to our approval than the brief section appropriated to the pathology of insanity. Keeping in mind the visible unity in the being of man, produced by the mysterious blending of his spiritual and animal nature, conscious of the sympathies as well as the warfare existing between them, discriminating

between those abnormities of soul which constitute insanity and distinguish it from sin, admitting the influence of physical processes upon mental diseases in certain cases without obscuring the doctrine of man's immortality, and, at the same time, recognizing the sublimity of thought that entered into the conception of Milton, when from the depths of his soul he said, "the mind is its own place, and of itself can make a heaven of hell, a hell of heaven," the author gives prominence to the psychological theory of the pathology of insanity, leaving to polemical divinity the task of settling the question, how far the infliction of mental as well as somatic diseases are the fruits of violence done to moral or to physical laws.

From this brief consideration of the theories of insanity, the author proceeds to the practical application of his general principles giving rules for the detection of mental unsoundness, as connected with the emotions, the condition of the nerves of special sensation, with sleep or morbid vigilance, gastric disorder, monomania, idiocy and delirium tremens.

How far this work, when completed, will supersede the admirable volume of Dr. Ray, or the more voluminous work of the late and lamented Dr. Beck, it is not the purpose of the writer of this notice to enquire, nor is it his design to institute a comparison, except on the single point of the pathology of insanity, between this unfinished labor and the productions of those gentlemen, whose labors had made medical jurisprudence a science, before Mr. Wharton had given the subject his attention. He cannot, however, justly withhold the expression of his approbation of the union of the legal and the medical profession in such an undertaking, nor the recording of his convictions, that in order to produce a work of the highest utility, the representative of each of the professions thus engaged should be practically as well as theoretically familiar with their subject.

If completed upon the plan by which this monograph has been finished, it will no doubt be creditable to both professions, and become a valuable work for the jurist, the lawyer and the physician, to consult.

Having said enough to call the attention of our readers to the book itself, I propose to execute the design by which I have been induced to write this notice, and that is, of enquiring whether this is the kind of work demanded, not simply by our professional exigencies, but whether it is adapted to our mental condition, and suited to our social necessities; and to make a few remarks suggested by its perusal.

This is a labor to which I should address myself with great reluctance, if there were no persons of unsound mind, except those who have departed so far from the normal standard, as to have become the appropriate inmates of our insane asylums. Under such a state of things, as would enable one to establish definite boundaries between the sane and the insane, I should deem it an act of presumption in one like myself, not addicted to the study of insanity as a specialty, nor to the moral and medical management of the insane, to express my views of the necessity for such a work and hardly an act of prudence to express an opinion of its merits, after it should have made its appearance.

After perusing the statistics of insanity in the United States, which painfully exhibit the ratio of its increase, a moment's contemplation of the incessant and intense activity of the causes at work in effecting an augmentation of the number of its subjects, is sufficient to repress any emotion of surprise that might otherwise be excited by the appearance of a new work designed to facilitate the adjudication of questions, involving the personal liberty and pecuniary relations of the insane, or by the contemplation of the fact, that so many competent persons should be found ready to engage in their production, even if moved by no higher incentive, than the prospect of a direct and immediate pecuniary reward. It is not my wish to be understood as intimating that our author has been actuated by no higher motive in his undertaking to publish this compendium of medico-legal jurisprudence, but rather by the higher consideration, which also centres in self, of desiring to leave some traces of his transit, some foot-prints, to mark his passage across the field of duty in which he has been permitted to labor, and even will suppose, for the present purpose, that he has been stimulated by the humane and elevating desire of doing good to those that are lost, in an intellectual sense, and travelling upon life's sea, to them an ocean of waste, with neither chart, nor compass, nor rudder, nor pole-star to guide them.

It is not to me a matter of surprise that capable and even talented men should be found engaged in the elaboration of such works; but I do marvel and feel constrained now, that my attention has been called to the subject to express my astonishment, that the wider and more elevated field of labor should not, ere now, have been entered by some master mind, some American Esquirol with the design of making such an analysis of the causes existing in our social and political institutions, occasioning the rapid increase of insanity in our country, as would enable him to produce such prophylactic results;

as would obviate the necessity of adjudicating upon the relations which persons, mentally unsound, sustain to the state, to society, to their families and friends.

Now, when love of country, that cement by which our national confederacy was formed into one government and our fathers were made one people, seems to be loosing its power of cohesion, under the influence of fanatical excitement—when the pulpit, filled with the elements of political contention and sectarian strife, no longer sends forth an unadulterated food for the healing of nations—when personal piety and saving faith, its foundation, are overshadowed by the tree of spiritualism, whose fruits, like the apple of Sodom, are bitter and fuliginous—when social and domestic authority are ruptured by the out-growth of a monstrous individuality, which acknowledges no submission to age, no obedience to laws that infringe the exercise of those privileges and powers that centre in this new production of a colloid civilization:—when all these causes conspire to bring about a dislocation of the social strata, and effect the precipitation of the organisms which mark the eras of a progressive civilization, we naturally look about for the being, or the power, which ever it may be, which, by its ability to re-establish the unity of the nation, the purity of the pulpit, to restore to individuals a purified faith, and a reverence for social and parental authority, shall guide us through the perils, by which, as a people, we are surrounded. The history of the past is our warrant for the future.

The circumstances by which men have been surrounded in every great era, by which there march from a state of barbarism has been marked, have served to develop the character and the attributes adequate to the demands of the occasion. Such was the case when Luther arose amidst the corruptions of the church and shook the powers of prelacy to its foundations. So it was when Hampden and Cromwell wrested the sword of despotism from the infatuated Charles and planted the seeds of constitutional liberty in England; and even more obviously so, when our own Washington was produced by the antecedents of the declaration of independence, to guide his country men through the perils by which they were surrounded, at the dawning of the revolution.

This great law is not limited in its application to the political condition of men. In the fullness of time, great poets and historians have appeared, and epics and histories have been written. Why may we not then, expect some name to arise, capable of giving such an

impulse to the national mind as will correct the psychological aberrations which distinguish the time in which we live.

On looking around us, one is led to suspect, either that the law of development to which I have just alluded, and in the universality of which I have expressed my belief has some exceptions, or that the reforming process is to be supervised by some higher power, and conducted without especial reliance upon man's instrumentality; or else an edict is being enforced requiring us still longer to suffer the penalties which follow the violations of natural, social and moral law, for there is not in our horizon, at this time, any manifestation of the approach or rising of such a star.

Our insane asylums are quietly and faithfully fulfilling the purposes of their endowment, neither the truth nor the purposes I have in view, require me to say otherwise. But whilst doing this, I feel constrained to express my apprehension that the whole influence of these institutions as specialties is inimical to mental development, and that it is and will continue to be the fate of those who minister therein, to undergo the process, analogous in its results to that occasioned by the practice of engrafting the larger fruit bearing trees upon roots so small, that they cannot furnish the nutriment sufficient to develop the tree and produce fruit at the same time. Hence we fail of obtaining support in that direction. This is true of other medical specialties, true also of the habit of restricting the mind in legal studies, to the investigation of particular subjects, and of the contemplation of matter in a particular relation like that of number or form, as takes place in the study of mathematics.

If proof were wanting that the influence of this principle was equally obvious upon the minds of those who day by day and hour by hour are the students of mental abnormalities, I would point to the institutions over which these men preside, and ask who are to make good the places once occupied by the Rushes the Woodwards, the Todds, the Gallaudets and the Brighams of a past generation.

I know there are men connected with this department of the profession, which do honor to it and to the specialty with which they are identified—these I cannot call by name, without wounding the sensibilities of others, towards whom I entertain the most kindly feelings. Still, I cannot erase from my mind the impression that as a corps it is degenerating, and for the reason that I have just stated, or else, unfortunate influences have been yielded to in the selection of them; for, if the fact were not true, irrespective of the manner of accounting for it, we should never have witnessed the spectacle

lately exhibited at Boston, in the appearing of the Superintendent of the McLean institution for the insane, as a witness for the authenticity of facts and statements made by spiritual media, whose acts on many occasions partake of the obscenity of a bordel, and whose revelations turn to mockery the solemnity attached to the word of God.

The opinion entertained by the profession at large of the injurious influence which the attention now given to the study and practice of specialties, is destined to exert, is well known to the readers of the medical journals; but as this opinion has been no where so felicitously embodied and expressed as by the Poet Physician of Boston, I copy for their instruction as well as amusement some of his remarks on that subject.

“ We must not disguise it from ourselves that causes are at work, within as from without, that may well occasion grave thought, on the part of those who are anxious that the profession should maintain its high standing. Medical practice is breaking into *specialties*, that make men skillful and narrow minded. The Egyptians had their specialists for each organ, and the indications are unequivocal of a return towards the state of primitive Egyptian culture. I do not say that it is not better for mankind that our art should be thus subdivided, but is full of danger to the social and intellectual standing of the profession. It is now six years, I think, since, in a written introductory lecture, I distinctly pointed out to my class the course which medical practice was shaping for itself. Every succeeding year has confirmed what I then said. The path to glory (?) in medicine now leads through the mucous membranes. Each one of these slippery high ways is invaded by its exclusive manipulator. One man passes his days in cauterizing throats and swabbing out bronchial passages. Another explores the narrow track from the fossa navicularis to the verumontanum, and there lives and moves and has his being. Another studies science through the valves of a speculum. Another selects a still humbler sphere, and holds divided empire with the ascaris !”

“ This subdivision of labor ends in most cases in the production at least of one cheap and perfect article—namely, a piece of human machinery capable of doing one thing well, and good for little else in many cases, stiffened, cramped, ankylosed in all the intellectual joints that give power and freedom to manhood.”

Lest the competency of medical testimony in the present case might not be admitted. I will refer to what has been said of the

effects imputed to the too exclusive study of mathematics, in which the analogies tend strongly to confirm the views I have tried to express on the subject of medical specialties, and this too by persons more competent than myself to form and give expressions to opinions.

“Whether and to what extent, the study of mathematics conduces to the development of the higher faculties, is a question which has been very confidently and very variously decided.” The schools on the continent of Europe, unlike their congener, the university of Cambridge, concede to this study but a subordinate utility, as a means of liberal education, I mean that education adapted to the development of the man, and not the qualifying of the man, as an instrument for the execution of some particular purpose or end.

On this subject Mr. Hamilton remarks:—“Of all our intellectual pursuits, the study of the mathematical sciences is the one whose utility, as an intellectual exercise, when carried beyond a moderate extent, has been most peremptorily denied by the greatest number of the most competent judges. Mathematics know nothing of causes; the research of causes is philosophy.”

“Lichtenberg, a celebrated Professor of Mathematics in Göttingen, makes this observation, from which I learned that he is a wit as well as a Mathematician. Mathematics are a noble science, but as for the mathematicians, they are often not worth the hangman.”

Le Clerc speaks thus on this subject: “There is also sometimes to be considered so great a number of modes and relations, and these so minute, that they cannot, without a far greater expense of time than we can afford them, be arranged in geometric order. And yet to form a correct judgment in regard to these, is a matter of much greater importance to us than concerning mathematical problems.”

“Some have been led to imagine, says Kirwan, “that the true way of acquiring a habit of reasoning closely, and in train, is to exercise ourselves in mathematical demonstrations; that having got the way of reasoning which the study necessarily brings the mind to, they may be able to transfer it to other parts of knowledge as they have occasion. This, however, is an egregious mistake.” “On the contrary, the habit of mathematical reasoning seems to unfit a person for reasoning justly on any other subject.”

Possibly, what I have attempted to prove as true of the status of our insane asylums, by the introduction of analogies, would have been admitted by that class of specialists at whom my remarks have been aimed. If so, an obvious duty devolves upon somebody of pointing out a remedy for the evils incident to the present plan of

managing those establishments and the mode of supplying materials to fill vacancies that may occur in their medical staff, unless they are proved to be inseparable, and of showing how their present proclivities may be arrested. This I propose to do, very briefly, before bringing this article to a close.

In that department of the medical profession, whose duties restrict them to the treatment of cases of insanity, as in the great body of it, whose sphere of labor is larger and whose relations to their clients more congenial, the surest guarantee for an enduring and expanding usefulness, the strongest incentive to high professional culture and continued development of one's capacities and powers lies in that social elevation, which an elegant preparatory education, associated with moral excellence, secures, to any and to all men who strive to achieve it.

This being admitted, the way to reformation is plain, short and direct.

Let no one, designed to hold a medical relation to the insane, engage in this specialty before reaching a matured manhood, and who has not, in early years, undergone the discipline which classical studies alone can give. Require in addition a familiar acquaintance with the elements of natural science, with the principles involved in mathematical discussion; but more than all that, should have carefully studied the logic and philosophy, keeping in mind the saying of Aristotle: "The Philosopher should end with medicine, the Physician commence with philosophy."

When, to these are superadded, the studies strictly professional, you have a model man who may be likened to a tree of strong vitality and vigorous development, on the arms of which without impairing its strength or symmetry, you may engraft all the varieties of fruit congenial to its nature.

Let us see to it that the trunk destined to bear and ripen these various fruits, is itself furnished with materials for its own development, and the period of its decay will be extended far into the future, ere when, our civilization may have become effete, and mental unsoundness have not yet become an attendant upon the new.

Z. P.

STATISTICS OF CONSUMPTION.—According to the official returns there were 4,600 deaths from Phthisis Pulmonalis, in Massachusetts, during the year 1854. Of this number 1903 were males, and 2707 females.

ARTICLE III.

Mr. President and Gentlemen of the Detroit Medical Society.—The subject, upon which I ask your attention this evening, is that of *Melanosis*, in other words *Melanotic Deposits*.

Whenever a substance is deposited in any part of the system, which has no analogy to the healthy structure, that substance is termed heterologous. Another kind of deposits has received the name of *Analogous*, which although being abnormal, yet have all or many of the characteristics of some of the tissues of the living body, a type of which may be found in the "Fleshy Tumor," "Cartilaginous Growth" and "Fatty Deposits." Again we have those although exactly resembling fibrous tissue; still, because it has a tendency to ulceration, has been classed as heterologous. A Urinary Calculous is heterologous, while a Biliary one is analogous.

The number of heterologous deposits generally described as such are *five*, viz. Urinary Calculous, Pus, Tubercle, Cancer and Melanotic Deposits. To these Dr. A. Clark, formerly Professor of Physiology and Pathology in the College of Physicians and Surgeons, New-York, but now of the Chair of Theory and Practice, has added three more, viz. Atheroma, Pseudo-bony deposits, which takes the place of the former, and which is seen in the Atheromatous form in the borders of the valves of the heart, especially the aortic, and extending into the coats of the aorta itself. The third is that which takes place in Peyer's Glands in Typhus, and is commonly known as the Typhoid deposits. These are for the most part primary, although some of them are secondary to other diseases.

Melanosis.—This word derived from the Greek *melas*, signifies *black* and means a deposit of black color in some part of the body. It is not usually malignant in its character, having little or no tendency to soften and occurring but occasionally. It has been generally decided as of two kinds, viz. true and false Melanosis.

True Melanosis may have its seat in any part of the body, but more particularly in the cellular and adipose tissues, and seldom, if ever, in the skin and mucous membranes. If seen in the skin and mucous membranes, Dr. Carswell believes that it is seated in the sub-cellular tissue, and seen through those structures. It is found in the bones, the spongy ones most frequently; in the compound structures as the liver and lungs, sometimes in the brain, spleen, eye, pancreas, lymphatic glands, thymus and parotid glands, kidneys, testes, ovaries, uterus and mammæ. It has also been detected in the blood. Dr.

Carswell states that, when found in the liver, it is in the minute veins, the vessels containing it appearing like black lines, or stripes, or dots, and sometimes in a pencelated form. Melanotic fluid or matter is very rarely found on the surfaces of cavities, natural or accidental, unless as an exudation from parts beneath or from the perforation of Melanotic tumors.

Melanosis is sometimes found *associated with other morbid productions*. Breschet, Andral and Lobstein have met with it in false membranes formed on serous surfaces, and the last named pathologist has seen it accompanying ossific deposits in the coats of arteries. It is sometimes found associated with the different forms of cancer, not only in the same organ, but in the diseased mass, hence some writers have considered it a species of cancer.

According to Copeland *Med. Dic.* pp. 955 vol. 2d, Melanosis occurs much less frequently in the lungs than in the liver, nor does it acquire the same bulk or extent as in that organ.

There are four varieties of true Melanosis, viz. 1st the punctiform, 2d the tuberiform, 3d the stratiform, and 4th the liquiform.

The first is that in which the black coloring matter appears in minute points or dots, grouped together or scattered over a considerable extent of surface. This form has been denominated "infiltrated" by Laennec. Dr. Carswell says, it is found mostly in the liver, the cut surface of which appears as if dusted with soot or charcoal, and seems to be deposited in the molecular structure of the organ. This form is not met with in the brain, nor in the cellular, adipose, serous and fibrous tissues.

The 2d, Tuberiform Melanosis, is by far the most common form of disease, varying in size from that of a pins-head to that of an orange, in man, or to that of a melon, in the horse. The great size, to which these tumors attain, are doubtless due to the agglomerating together of numerous small ones lying in contiguity. The single tumors are found mostly in the compound tissues and organs; the aggregated in the cellular and adipose tissues. Each may be either *encysted* or *non-encysted*; in the latter the black matter is in immediate contact with the parts, in the former the covering of the cyst is condensed cellular tissue, stretched out around the contained matter.

Melanotic tumors, which are found occasionally on the surface of the peritoneum and pleura, and there even assuming a pedunculated form or polypoid appearance, seem to be developed beneath the peritoneum and in their growth carrying the serous membrane before and around them thus constituting the cyst or envelope. Some-

times, however, but rarely, the Melanotic matter is found on the free surface, and which doubtless has arisen from the rupture of one or several of the cysts.

3d, Stratiform Melanosis seldom occurs in man, but mostly in the horse, and when seen may only paint or stain the serous surface or form a distinct layer, in which case it assumes the consistence of a jelly, and seems deposited in a very fine, transparent, soft, spongy tissue.

4th, Liquiform Melanosis, like the former is seldom met with in man, and is mostly found in natural or morbid cavities, where it is either secreted, or exuded, or effused during the softening process of Melanotic tumors.

One of the above forms may exist singly, or they may be found combined. The Tuberiform is the most common form the disease assumes. "Melanosis is never confined to one organ or tissue alone, but is found to pervade a greater or less number, simultaneously or successively. It may be almost equally extensive in all parts which it invades, or it may be abundant in one part and scanty in another, even so abundant as to render the natural structure unintelligible."

Melanotic matter is generally supposed to be deposited in a fluid state, and its after consistence depends much upon the texture and form of the part where it is deposited. The solidity, it attains doubtless, depends upon the absorption of its watery parts.

Viewing it in this light and also by the aid of the Microscope, it is to be inferred that Melanotic matter is unorganizable and is merely an extra-vascular deposit or exudation. Says Watson: "It is very like the blood in its composition, and no doubt, the material is somehow deposited from the blood." Other pathologists, as Lasaigne, Henry, &c., give us the result of their analyses, that it is essentially composed of the coloring matter of the blood and fatty substance. M. Foy considers it to be the coloring matter of the blood highly carbonized, and Copeland says this is probably the truth.

In the progress of Melanosis certain changes take place: 1st, in the deposit itself, and 2d, in the tissues where it is deposited.

The changes in the deposit itself consists 1st, in the absorption of the watery part, and 2d, in the softening, which takes place as a result of the irritation produced in the tissues where located, viz. the effusion of serous fluid in and around it. 3d, the change of structure. This, can readily be seen, must be the result of a foreign body or substance, abnormally placed, producing irritation, inflammation, (or even by bulk rupturing the containing membrane) and lastly ulceration and

entire destruction of the part implicated. Melanotic ulceration is however rare, and softening of the inspissated matter equally so.

The symptoms and diagnosis are exceedingly complicated, and but rarely can be made out ante-mortem. Dr. Copeland reports his observations of a case as follows :

“ A gradual sinking of the vital energies, a cachectic habit of body, a dusky or ash-colored countenance, and a marked change of the nutritive functions, giving rise to great emaciation, dropsy, a partial œdema of the cellular tissue, and sometimes effusion into the serous cavities, to a weak, quick and small pulse with night perspirations towards the end of the disease, and occasionally when the lungs are affected, to a blackened mucous expectoration. Melanosis is most frequently met with in advanced life, is not confined to the human species, and it seems probable that it is occasioned by whatever lowers the vital energies, and impedes the function of the biliary and respiratory organs.”

Pathology,—Dr. A. Clark considers it merely a deposit similar to the pigment of the eye in a state of crystallization.

Laennec as a distinct species of cancer, to which opinion he must evidently have been led from the circumstance of both diseases being so generally found co-existent.

Dr. Copeland considers it as a product secreted from the blood, owing to an enfeebled state of the vital influence of the system generally and the capillary vessels in particular. This condition being insufficient for the healthy changes to proceed, therefore free carbon accumulates in these vessels, which under the defective vital energy of the system and diminished tone of the extreme vessels, is deposited with other constituents of the blood.

Rokitansky considers that the ground work of pigment is the coloring matter of the blood. He deems it advisable to abolish the true Melanosis, and substitutes the term *pigment formation* in its stead, as the cases in which pigment is obviously obtained, is from the hæmatin and blood corpuscles. But how this is brought about, and, still more, the various shadings of the pigment, are unexplained.

“ That hæmatin undergoes various and considerable changes cannot be doubted, which changes may be brought about by the aid of chemical agents, addressed sometimes to the hæmatin itself, and sometimes to the iron it contains.”

On summing the whole subject, it is reduced to the entailed general view of defective decarbonization of the blood, to which the abundance of carbon, detected by analysis in the various black substances, cer-

tainly adds weight. He considers the russet and yeast colored pigment as derived from the same uniform base with black pigment, and that it is both susceptible of deepening into blackness and of fading into paleness.

The organs, most liable to become the seat of pigment formation, are those which, in proportion to their vascularity are prone to hyperæmia, inflammation and hemorrhage, and to the extent in which the blood supply is marked by an excess of coloring matter, viz: venous blood. In itself he considers pigment as an innocent new growth.

Mr. Fergusson, *Lancet* Nov. 1855, on the indefinite nature of Melanoid tumors, is of the opinion, "that the Melanic or black matter of Melanoid growths is something of an accidental deposit, and not in any way significant of a specific series of the worst kinds of malignant growths or cancer, 'black cancer' as they are called in Edinburgh."

In view of the above learned opinions of the pathology of Melanosis, it may be deemed rather presuming upon us to present any other. We have often thought of what relations Melanosis proper and purpura might bear towards each other, and why the Hemorrhagic effusions might not eventually become the nucleus of Melanotic deposits. Both diseases depend doubtless upon a discrepancy in the due assimilation of the blood and digestive products. Some facts derived from the specimens I shall present this evening, have a marked relation to this view.

They were removed in a post-mortem examination of the body of D. S——t, Esq., and were at the time good examples of the form heretofore mentioned as *Tuberiform Melanosis*.

The external appearance of the body presented a light-brown or dark shade simulating the color of the skin in recovering from a severe attack of jaundice. Upon opening into the peritoneal cavity, the walls were found nearly two inches thick with fat of a dark rich color, but containing no indications of the Melanoid deposit. The omentum and intestines were also richly laden with fat. The surface of the peritoneum, especially in the right hypogastrium, was studded with small black tumors like black currants, appended by their stems to the surface. The entire peritoneum appeared dotted with the Melanoid matter in varying shades from light-brown to black. This appearance was also seen in the mesentery, in the intestines both large and small. The liver was enlarged extending into the left hypochondrium, and attached by its left lobe to the spleen, which was also enlarged and connected to the pancreas, the latter organ

being very hard and contracted. The liver was engorged with a thick black fluid, like West India molasses. The right lung, as you will perceive, is finely studded with the deposit, both on its surface and in its substance, and in the apex of which you will see the appearance of two cicatrices. Whether the result of tubercular softening and absorption, I am not positive yet. I think they are. In one of them the substance is pale black. The left lung broke down readily by the hand in the attempt of removal, and contained the same black pigment.

In the peritoneum portion to be presented, the deposit has lost its color from maceration, which fact goes strongly to prove either that the deposit had not existed long, so as to be crystallized, or that the latter condition but seldom occurs. At any rate it must be something else than the carbon of the blood.

Concerning the treatment of this disease, but little can be said, and as little known, owing to the great difficulty in its diagnosis. Any means proper to assist the natural functions of elimination would be proper, as also in the imparting of tone to the various assimilating organs, and in arousing the power of life, which, with a due regard to exercise and abundance of fresh air, would naturally suggest themselves.

Detroit, Feb. 21, 1856.

WM. BRODIE.

ARTICLE IV.

Hospital Report—St. Mary's Hospital.

BY EDW. BATEWELL, M. D.

The report of the following case is remarkable not alone for its philosophical and pathological interest, but also for the practice which was adopted, namely :

The injection of the large serous peritoneal cavity with Iodine, without producing any effects of sufficient importance to deter the medical practitioner from resorting to it, in those cases where no organic impediment exists, and where no lesion of the contained viscera is the cause of the effusion into the peritoneal sac, but where it sim-

ply arises from some imperfection in the absorbent system, as produced by chronic peritonitis, which all have found to be so intractable in its treatment, that the several emunctories of the human body may be in vain solicited and excited to carry off the effused fluid.

George D——, aged 29, by occupation a cab-driver, of temperate habit, states that about four months ago, he got whilst driving, a severe chill, followed by fever, that lasted for several hours, when another chill succeeded, which continued for three or four hours, followed by a hot dry skin. That this state continued for some days, without any change of symptoms, *or any perspiration* to relieve him; he then applied to some physician who gave him medicine “to work off the fever;” but though it relieved the fever, it left him an uncontrollable diarrhœa, which reduced his strength very considerably. However, he finally succeeded in getting it stopped, and about three weeks after, felt his bowels very tender and swollen, with considerable difficulty in passing water, which was high colored and diminished in quantity, and on November 24th presented himself at St. Mary’s Hospital with the above symptoms. The first thing attempted in his treatment was to restore the healthy action of the skin. He was ordered to have the body sponged with tepid water, and to have Quinine and Morphine twice daily.

25th. No increase of the perspiration though all the other symptoms are improved.

26th, 27th, 28th. Continue the above.

29th. Ordered Apocynin, gr. iii, every third hour.

30th. No improvement. Ordered to continue.

Dec. 4th. Ordered Tr. Ferri Mur., gr. 15, three times a day. Water much diminished in quantity and considerable tension of the abdomen.

5th. The urine does not increase in quantity. He was tapped, and two pails full of clear fluid was drawn off. Ordered Apocynin again with an Anodyne.

6th. Much relieved. The kidneys act well, and a slight moisture of the skin is perceptible.

7th, 8th, 9th, 10th. Continues better. Left Hospital.

States that the day after he left, his limbs commenced to swell and that he was under the care of two German physicians, who tapped him twice during his absence. He does not know the course of treatment pursued, but on the first of February he returned to the hospital with all his symptoms much aggravated, and all the secretions diminished or suppressed. The bowels constipated, the urine diminished.

the skin dry and harsh, the tongue glazed and red. Ordered Apocynin, gr. iii, every third hour. The bowels to be painted with Iodine.

2d, 3d, 4th, 5th, 6th. Continue Iodine externally. Ordered Spt. Mindereri, ℥i and Vini Colchici, gt. x, every third hour.

7th. No improvement being perceptible and the tension being very great. He was again tapped in the Linea Alba, and about four gallons of a straw-colored fluid was discharged. The following was then injected into the cavity of the peritoneum, and after being left for a few moments, was again withdrawn:

Iodinii. Hydriodat. Potassæ, a. a. scruple 1. Aquæ ℥i. This caused him considerable pain which lasted for an hour, and was then ordered Morphine, $\frac{1}{4}$ gr., in Gin Toddy.

8th. Enjoyed a good night's rest, which he had not done previously, appetite good, pulse fuller than usual, bowels had moved freely. Ordered Vini Colchici, xx, every third hour, and gr. iii of Hyd. C Creta at bedtime. No tenderness or pressure over the abdomen.

10th. He had a slight chill last night, seems as usual, but nothing worse. Secretions perfectly natural, pulse and appetite good. Ordered Quinine and Morphine.

11th. Feels better. Abdomen increasing in size.

12th. He was again tapped and about six quarts of clear fluid drawn off. The quantity of the Iodine injection was increased to four ounces, which caused *but a slight amount of pain* for about half an hour. To have Quinine, gr. iii, Morphine, gr. $\frac{1}{8}$, three times.

13th. Feels better to-day. Pulse not so full as usual. *No tenderness over the abdomen.* Bowels regular. No fever or chill. Kidneys acting well. Appetite good. Ordered to continue medicine

14th. As yesterday. Continue.

15th. Slept well; but has no inclination to eat. Pulse feeble and sinking. *No tenderness over the bowels* which have been regularly moved. Ordered to continue medicine and have Toddy.

16th. Continued to sink, and complained of pain in the bowels during the night, greatly increased towards morning, when he sank without any appearance of suffering towards the last.

Autopsy 6 hours after death. On opening the cavity of the peritoneum, the first thing that was observed was an ecchymosed spot, just around the place where the trocar had entered the peritoneal sac. Traces of general peritonitis, but not of any very recent date, except towards the inferior portion of the intestines and on the "Cul de Sac," behind the pubis; here evidence of inflammatory action presented

themselves, effused lymph appeared, and the serous surface of the bladder was congested and thickened. The liver presented incipient yellow cirrhosis, and was also of interest as offering an example of those rare abnormalities termed by Rokitansky "congenital multilobular liver." In these cases, according to that celebrated author, the fissures bounding these supernumerary lobes, being generally well defined only on the concave surface, in this case, however, so well marked on both surfaces as nearly to divide the organ into separate bodies, the gall bladder was distended with bile. There was not sufficient amount of disease about the liver, apparently, to account for the great disturbance of the system. The kidneys were perfectly normal, the spleen was large and full of dark thick blood. The stomach was large and its coats were evidently increased in density. The coats of the intestines presented the appearance as if they were boiled, they were white and hard, and on being cut into, were nearly an eighth of an inch thick. The mesentery had entirely disappeared. The peritoneum had become more like the cuticle than any thing else, it was thick and hard, and possessed none of the peculiarities of serous membrane.

On reviewing this case, the point of interest is, what was the immediate cause of death? was it the original disease or was it the evidences of recent peritonitis? We consider the original disease, as being the sole cause. First of all, he never had an uneasy symptom, or complained of any pain or tenderness during the period of his treatment; next, his pulse never showed any mark of inflammatory action, or indicated ought save an increased volume, and nearer approach to the healthy standard, the functions were all improved, the secretions became natural, he felt better and appeared to convalesce. But the physical strength of the patient had run down too low to admit of any hope of a successful termination to any proposed method of medication. The amount of albumen, so essentially necessary to health and strength, which instead of entering the system, was carried off in the effused fluid, would of itself be sufficient to account for the death of this patient, without alluding to the non-assimilation of food that the pressure of it caused; again an analogous case, as reported in the last number of the *Peninsular Journal*, proves that the only possible cause to be assigned, was that the natural power sank beneath the primary disease. That the injection of Iodine was productive of good, we unhesitatingly assert, as evinced by an activity of the secreting organs after its use. The secretions became natural. The kidneys, liver and bowels acted as if convalescence had ensued, the skin

assumed a more healthy action, and the patient himself declared his increasing strength, and hopes of convalescence. Another point of interest connected with this case, which has arisen in our mind, is, whether it is not far better primarily to remove the effused fluid, before trying to excite the natural emunctories to increased action. In all the cases where ascites was present, both in our practice and in the several cases which, by the kindness of Dr. Pitcher, we witnessed at St. Mary's Hospital, the facility with which the organs acted, not alone whilst under the effect of stimulation, but without any exciting cause, more than their usual natural action, after the fluid had been drawn off, created in our mind considerable doubt whether it is not better practice first to remove the superincumbent weight previous to attempting medication. The several post mortem examinations which have been held on patients who died from this disease, prove that in most, if not in all, the affection lay in the absorbent system, and that the kidneys and liver though frequently put down as the cause of ascites, are seldom to blame, the absorbents not carrying to the blood the effete matter to be thrown out of the system by these organs.

ARTICLE V.

NORTH-EAST MEDICAL AND SCIENTIFIC ASSOCIATION.

OFFICERS FOR THE PRESENT YEAR.

Dr. SETH L. ANDREWS, *President.*

Dr. I. PADDOCK, *Vice President.*

Dr. A. R. STONE, *Secretary.*

Dr. B. C. SUTHERLAND, *Treasurer.*

COUNTY COMMITTEES.

Oakland—Action of Remedies, C. EARL; Epidemics, I. PADDOCK; Surgical Practice, E. K. PHILLIPS.

Macomb—Action of Remedies, Dr. J. S. SMITH; Epidemics, P. TILSON; Surgical Practice, WM. BROWNELL.

St. Clair—Epidemics and Action of Remedies, C. M. STOCKWELL, J. KIBBEE.

Lapeer—Action of Remedies, Dr. KENNEY; Surgical Practice, A. R. STONE.

ROMEO, Feb. 7, 1856.

Association met pursuant to adjournment from Annual meeting, and was called to order by the President.

Dr. Strowbridge presented for the consideration of the Association an order of Business, By-Laws, &c., and on motion, the same were adopted.

The regular order of business having been suspended for the time being, the Association proceeded to the election of new members, and Drs. McCollum, of Auburn, and Hayes, of Farmington, Oakland county, were elected.

Mr. Douglass, Dentist, and Dr. Nims, of Romeo, were elected honorary members.

Dr. Taylor offered the following preamble and resolutions urging their adoption by a few pertinent and forcible remarks. The same were unanimously adopted:

Whereas, Our State University of learning is among the first of our State enterprises, and

Whereas, To sustain its character and promote its usefulness, demands the vigilant regard of the people of our State, and

Whereas, Many attempts have been made, as we believe, with a view to injure its character and cripple its usefulness to gratify selfish and interested motives by attempts to thwart the plans and impugn the purposes of the Regents and Faculty, Therefore

Resolved, That we scorn to flatter as we scorn to withhold merited justice, but deem it a virtue to bestow credit where credit is due.

Resolved, That we consider the medical department of the institution as being unequaled by any of our sister States, and in point of ability the boasted pride of the physicians of Michigan.

Dr. Taylor also offered the following resolution, which was unanimously adopted:

Resolved, That we view our *State Journal of Medicine* as indispensable to the profession of the State, and that its able management reflects credit upon its editors.

On motion, the several committees, whose duty it was to have made reports upon professional subjects, were granted six months further time.

On motion, the Association proceeded to elect delegates to the State and National Societies, with the following result:

To the State Society—Dr. C. M. McCollum, of Oakland Co.; Dr. J. S. Smith, of Macomb Co.; and Dr. J. S. Comstock, Lapeer Co.

To the National Society—Drs. W. H. Hayes and C. McCollum, of Oakland Co.; Drs. O. P. Strowbridge and A. C. Kenny, of La-

peer Co. ; Drs. C. M. Stockwell and J. Kibbee, of St. Clair Co. ; and Drs. A. E. Leete and J. S. Smith, of Macomb Co.

On motion, voted that each delegate have power to appoint a substitute in case of inability to attend.

On motion of Dr. J. S. Smith, voted that there be four standing committees appointed annually by the chair, to report on the following subjects : Action of Remedies, Epidemics, Surgical practice, and Obstetrics.

The chair appointed as such committees for the present year : on Action of Remedies, Dr. Haze ; Epidemics, Snell ; Surgical practice, Strowbridge ; Obstetrics, Dr. McCollum.

Dr. Andrews made a very interesting report in regard to the meteorological observations made thus far, and

On motion of Dr. Taylor, voted that a copy of the report be transmitted to the *State Journal of Medicine* for publication.

On motion, voted that an assessment of 50 cents on each member of the Association be raised semi-annually until sufficient is raised to procure a full set of meteorological instruments, to be the property of the Association.

Dr. Knight offered the following resolution, which was adopted.

Resolved, That the committee in each county on the subject of epidemics be authorised to appoint associates to report upon any or each particular endemics of said county as a special report.

On motion, voted that the following resolutions be published in connection with the proceedings of this meeting :

Whereas, The code of ethics of the American Medical Association—which code is universally adopted by all subordinate associations—discourteances all fellowship with irregular Practitioners ; and

Whereas, To continue in confidence and merit the esteem of the Profession requires and demands unwavering and absolute compliance, Therefore

Resolved, That we pledge to community, to ourselves and to the Profession alike, our sacred honor, that we will not only discountenance all such, but all Practitioners who may be guilty of knowingly or intentionally violating this rule.

Dr. Taylor offered the following resolution, which was unanimously adopted :

Resolved, That the North-East District Medical Association tender to the Committee of Arrangements at Detroit, whose duty it is to make preparation for the meeting of the American Medical Society in that city in May next, their willingness to bear a portion of the necessary expenses incurred.

On motion, Dr. Strowbridge was appointed a committee to procure a Speaker for the semi-annual meeting in June next.

Dr. Taylor offered the following resolution, which was unanimously adopted:

Resolved, That we fully approbate the course taken by the Regents of our State University in treating with neglect the fanatical scheme of the Legislature in regard to the appointment of a chair of Homeopathy in our State University.

On motion, voted that, when this Association adjourn, it adjourn to meet at Pontiac on the 2d Thursday in June next.

The Association adjourned.

ARTICLE VI.

Proceedings of the Detroit Medical Society, reported for the Peninsular Medical Journal.

THURSDAY EVENING, Feb. 21, 1856.

The Society met at the office of Dr. BRODIE.

Present—Dr. Inglis, President; Dr. Robinsin, Vice President; Dr. Lauderdale, Secretary; Drs. Pitcher, Stebbins, Kane, Watson, Klein, Brodie, Batewell, Henderson, and Christian.

The Secretary read the minutes of previous meeting, which were approved, and a communication from Dr. Brodie, one of the Secretaries of the American Medical Association, which was ordered placed on file.

Dr. Brodie, essayist, then read an entertaining and instructive paper on the subject of Melanosis, exhibiting in connection with it a specimen of the tuberiform variety of Melanosis deposited in the lung of a gentleman of this city, recently deceased. The history of the case was recited by Dr. Pitcher, in whose practice it occurred, as follows:

The gentleman, age 48, had suffered at times for several years prior to his last illness, with dyspeptic symptoms, for which he had exercised the most rigorous care in regard to his diet. One of the most prominent and troublesome symptoms was obstinate constipation. Last summer he was advised to go to the Sulphur Springs in Virginia, from whence he returned in the fall much improved and very sanguine of complete recovery. His digestion was better, and the skin, which had been before dry and harsh, having apparently entire-

ly ceased its function of perspiration, had now resumed its proper tone. Up to within forty-eight hours of his death he had been in his usual health since his return, complaining only of exhaustion after active exercise, in which he was careful daily to indulge. There had been no symptoms to attract special attention to the lungs, nor indeed sufficient to afford a diagnosis of any organic disease there seated. The kidneys acted well, and his mental faculties were unaffected. Dr. Pitcher, when summoned, found him suffering intense pain in the region of the gall bladder, and from the character of the pain conjoined with the character of his previous difficulties, was led to suspect that the pain was caused by the passage of gall-stones through the biliary duct, none of which, however, were found at the necroscopy. The cause of death he attributed to prostration from the intolerable agonizing pain. The post-mortem appearances have been already described in the paper of Dr. Brodie on Melanosis in another part of this number.

Dr. Brodie also presented a liver taken from a patient who recently died of ascites at St. Mary's Hospital. The liver, which presented incipient yellow cirrhosis, was also of interest, offering an example of one of those rare abnormalities, termed by Rokitanski "congenital multilobular livers," according to that celebrated author, the fissures defining the lobes, being generally only well marked on the concave surface of the liver, in this case so well marked on both surfaces as almost to divide it into separate organs. The history of the case, which is also interesting by reason of showing the safety, if not proof, of the efficacy of iodine injections into the peritoneum, has been elsewhere given by Dr. Batewell, who attended the case.

Dr. Brodie also presented a specimen showing extensive disease of the knee. The amputation above the knee was performed by him the day before at St. Mary's Hospital. The man, a Canadian, lately came in, was 51 years of age. About three years since he was seized with severe pain in the left knee, while haying; inflammation set in with swelling, &c., and for the last twenty-seven months he has been confined to the bed. An abscess formed early in his sickness, and a large quantity of pus was discharged by lancing. The skin showed extensive cicatrices from scarrification all over and about the joint. Ever since the abscess was lanced, the opening had remained fistulous and others had formed discharging a great quantity of pus. When he entered the Hospital, there was much enlargement of the knee; the leg bent at right angles with the thigh and immovable on it. The patella was felt pushed over on to the internal tuberosity of the tibia.

The specimen presented, showed extensive ulceration of the soft parts, absorption of the articulating surfaces and of the crucial ligaments, softening of the heads of the bones, and also of the shaft of the tibia at points in its whole length, and also of the tarsal and metatarsal bones at their articulations. The man up to this time is doing well.

The reports of the members indicated no prevailing sickness.

Dr. Watson mentioned having met with several cases of scarlatina, one of which in a boy, twelve years old, was very severe. The fever at the commencement manifested a decidedly remittent character, the limbs becoming cold, and the blueness as intense as that of cyanosis. The fever afterwards assumed a typhoid type. c.

SELECTIONS.

ON THE TREATMENT OF STRICTURES OF THE URETHRA.

BY L. A. DUGAS, M. D., &C. &C.

In order to be prepared for the study before us, it is proper that we direct our attention to the normal anatomy of the urethral canal, so far as this may be necessary to elucidate our subject. We need dwell neither upon the curvatures nor variable length of this canal, but merely recognize its usual subdivision into a spongy, a membranous and a prostatic portion, as calculated to facilitate and make our language more definite. It is worthy of notice, that these several portions of the canal present different diameters: thus, while the meatus and the beginning of the membranous portions are the most contracted points, the bulbous and central prostatic portions are those whose diameter is greatest. Indeed, the whole length of the canal presents inequalities of diameter more or less marked at different points, so that its real transverse dimensions cannot be represented by any given measure. The dilatability of the urethra is also found to be unlike at different points. The researches of Reybard have demonstrated that the *meatus* may be dilated to twice its normal diameter, but that the *fossa navicularis*, just beyond the meatus, is much less yielding; that from this point to the suspensory ligament the canal is more dilatable; and that its most yielding portions are the bulbous, membranous, and prostatic, but especially the vesical meatus. These peculiarities obtain at all ages, but the canal is more dilatable in the old than in the young. The same observer ascertained that when the forced dilatation was carried so far as to produce

a rupture, this was found to exist alone in the mucous membrane; that the laceration was longitudinal and upon the inferior surface of the canal; and that the spongy tissue was susceptible of a still much greater degree of dilatation without being torn. The fissure thus produced in the mucous membrane would therefore be increased in width, according to the force of dilatation, leaving the spongy tissue uncovered to this extent. It is thus that the canal may be very considerably dilated after scarrifying the mucous membrane, without impairing the integrity of the other tissues.

The inner surface of the urethra is lined by a very thin mucous membrane, which, in the flaccid state of the penis, presents slight longitudinal wrinkles. Reybard denies ever having found the *transverse* wrinkles and valvular arrangements which are affirmed by some to offer an impediment to catheterism, even though the penis be pulled so as to efface them. He acknowledges, however, that the point of a very fine bougie may be arrested just beyond the fossa navicularis by the *hymenial valve* recently discovered there by M. Guerin. Near the vesical extremity of the urethra, the posterior or inferior face of the mucous membrane spreads out and presents on either side of the median line the orifices of the seminal and prostatic ducts, in front of which may also be seen those coming from the glands of Cowper. The lacunæ of Morgagni exist along the mucous surface, but in greater numbers about the bulb, and may sometimes arrest very small instruments.

Let us now examine the peculiarities of structure presented by the other constituents of the urethra in the spongy, the membranous, and the prostatic portions respectively.

The spongy portion of the urethra is that which extends from the meatus urinarius externus to the arch of the pubis, and it derives its name from the circumstance that the mucous membrane is here surrounded by a peculiar erectile structure denominated the corpus spongiosum urethræ. This corpus spongiosum is contained between two laminæ of fibrous structure, the one upon its internal and the other upon its external surface, both of which, however, coalesce at their anterior and posterior extremities, and also along the groove formed by the lower junction of the corpora cavernosa, to which they adhere. We have here, therefore, a closed fibrous sac, within which is confined the spongy or erectile tissue, which tissue, being more abundant at the anterior extremity, and overlapping the ends of the cavernous bodies, constitutes the glans penis. In like manner is the *bulb* of the urethra the result of an increased development of the spongy tissue in this portion. The matrix or sheath of the corpus spongiosum is then separated from the urethral mucous membrane by the *sub-mucous*, and from the skin by the sub-cutaneous cellular tissue. The bulb is much more developed in the adult than at an earlier age. (Vidal. *Med. Oparatoire*, Tom. 4, p. 488.) The contractility of the urethra is attributed to the existence of a stratum of circular muscular fibres in contact with the inner lamina of this sheath. According to some, the muscular fibres enter into the structure itself of the lamina, and are separated from the mucous mem-

brane by a vascular net-work. The thickness of the urethral walls, in the spongy portion, is not uniform, but is greater inferiorly than laterally, and gradually increases as we approach the bulb, where it reaches its maximum. The dilatability of these walls is also in a direct ratio to their thickness, being therefore greater inferiorly than elsewhere. Hence the importance, in catheterism, of directing the point of the instrument towards the superior surface. The spongy body is supplied with blood from the internal pudic arteries, branches of which make their way into the bulb and terminate in the cells of the spongy tissue, from whence the veins originate, as may be demonstrated by fine injections which pass readily from either class of vessels into the other.

The *Membranous* portion of the urethra is that intervening between the bulb and the prostate; and its length is variously estimated at from 5 to 12 lines. "Its structure differs from that of the spongy portion. Externally to the mucous membrane we find a stratum of pale muscular fibres similar to those of the bladder, some of which are circular and others longitudinal. Still beyond these there exists a layer of fleshy fibres, red, numerous, and compact; these are the muscles of Wilson. The union of these tissues gives to this portion of the urethra such considerable thickness that it becomes the firmest of all, as has been remarked by Amussat, who properly designates it as the *muscular* portion. It is resistant and contractile, for which reason the fibres which surround it have received from the same anatomist the name of vesical sphincter." (Reybard. *Traite des Retrecissemens de l'Uretre*, p. 26.)

The *Prostatic portion* of the urethra is that which is imbedded in the prostate gland and communicates with the bladder. Its length necessarily varies according to age and the condition of the prostate. Hence this is stated to be from 6 to 16 lines. It has been found in some pathological conditions of the prostate to exceed its natural length by two inches; a fact which should be borne in mind. The same remarks are applicable to the *diameter* of this portion of the canal, which is, as already intimated, naturally greater here than elsewhere. The firmness or resistance of the walls of this portion of the canal must vary according to the state of prostate which surrounds them.

Having as briefly as possible directed attention to such portions of the anatomical structure of the urethra as may have a bearing upon the subject before us, let us now advert to some of the pathological states observed in strictures of this canal.

The classification of strictures of the urethra varies according to the peculiar views of authors. Ducamp, after stating that they are always the product of inflammation, adds that "the mucous membrane of the urethra, irritated for a length of time, becomes thickened in one or more points, and terminates in induration." (p. 8.) He then studies the effects of this morbid action under the heads of induration, bands, and carnosities. Amussat says that they are organic, spasmodic, and inflammatory; that "the name of organic stricture is given to points of engorgement which are formed upon the mucous

membrane of the urethra or in the tissues which surround it." And adds, that there are "four species of organic strictures: 1st, fræni; 2d, valvular strictures; 3d, strictures produced by a chronic swelling of the mucous membrane; and 4th, callous strictures, which comprise the indurations and nodes found in the subjacent and spongy tissues." (Lectures, p. 17.) According to Prof. Gross, these strictures are "either transient or permanent." The former are spasmodic, and therefore paroxysmal; but in the latter form the stricture "is always caused by an effusion of plastic lymph into the lining membrane and the subjacent cellular tissue of the urethra, where a portion of this substance remains, and is ultimately organized, being thus incorporated as a constituent element with the pre-existing strictures."—"Organic strictures" (he continues) "are divided into simple and complicated, common and traumatic, soft and callous, dilatable and undilatable, permeable and impermeable, recent and old." (p. 615.) Reybard remarks, that strictures of the urethra are of four kinds: the spasmodic, the inflammatory, the organic, and those consequent upon the existence of intra or extra-urethral tumors. (p. 45.)

We consider all strictures of the urethra, organic lesions, whether appreciable or not by post-mortem inspection. Those termed spasmodic, depend upon a morbid sensibility of the tissues, which usually leaves no visible trace after death, although they may be attended with marked irritation or phlogosis during life. Indeed, such reflex contractions indicate the existence of irritation at some point or other of the urinary apparatus, and cannot be supposed to occur without. The strictures dependent upon inflammation, in the ordinary acceptation of the term, and those attended with deposits of new matter in the walls of the urethra, may for the most part be readily detected after death, as they are also the most unmistakable during life. The study of these various modifications of organic lesion may, however, be perhaps facilitated by adopting the classification proposed by Reybard.

Spasmodic Strictures.—These are, as the term indicates, impediments offered to the flow of urine or to the passage of instruments by a contraction of the muscular fibres which enter into the structure of the urethral parieties; and, like all spasmodic affections, they must be more or less transitory, or paroxysmal. Theory alone would teach us, and observation confirms it, that such spasms must be provoked by irritation, more or less intense, at some point of the canal. As irritations of the mucous surface of the bladder, stomach, or intestines, will induce contractions of the muscular coat of these organs, so will the same cause excite similar action in the urethra. Yet, the degree of irritation in the mucous surface of the urethra may be so slight as to give rise to muscular contractions only when aggravated by the contact of urine or of an instrument; and hence it is that these contractions may sometimes be obviated by merely lessening the acrimony of the urine, as I have frequently done by the use of alkaline and mucilaginous beverages. There are cases in which this irritation is so slight as to be unknown or unfelt, except when, under the influence of venereal excesses, debaucheries, or exposures to cold, it is suffi-

ciently increased to provoke spasmodic contractions. It is then that we should not only endeavor to lessen the acrimony of the urine, but also to diminish the local irritation by means of baths, leeches, opiates, cathartics, &c.

Nothing is more unsatisfactory than the conflicting opinions of writers with regard to the most frequent seat of strictures in general; but we may reasonably conclude that *spasmodic* strictures must occur most frequently where the muscular fibres are in greatest number; and, although they are met along the course of the spongy portion of the urethra, I think that they are most frequently found to exist in the membranous or, as Amussat has very properly styled it, the *muscular* portion of this canal.

Organic Strictures.—By this designation we understand those diminutions of the calibre of the urethra which are induced by such vital conditions of the tissues, and such deposits of new matter in them, as may either impair their normal elasticity or offer a mechanical obstruction to the flow of urine. A mere congestion of the mucous membrane alone, or in common with the subjacent structures, may impair their elasticity and materially impede the flow of urine, without being susceptible of detection by passing the finger along the seat of stricture when an instrument is introduced during life, and without leaving any traces discernible by post-mortem examination. Such cases are by no means of rare occurrence.

It must be remembered that the walls of the urethra are habitually in apposition, or, in other words, that the canal is closed, except during the temporary distention occasioned by the passage of urine. Hence it is that a mere impairment of the elasticity of its tissues will impede to a certain degree the flow of urine. This closure is so complete that the orifice of the urethra is scarcely perceptible in the stump after amputation of the penis, and it is very difficult to introduce a catheter under such circumstances. Every one knows how difficult it is sometimes to catheterize a patient affected with phymosis, when the meatus externus is hidden from view.

The source of obstruction is sometimes referred to a *thickening* of the mucous membrane alone; but we apprehend that the degree to which this may be carried, has been much exaggerated. Indeed, we know that in other parts this membrane is not susceptible of much thickening, and that the true extent of this can only be determined by tearing up slips of it and comparing them with slips taken from a healthy surface. It is in this manner very rarely found to be more than double its normal thickness, which is very slight, and could not therefore of itself occasion any very serious obstruction. The error consists in confounding the infiltration of the subjacent cellular tissue with that of the mucous membrane itself. Yet, if this thickening be complicated with an impairment of elasticity, the flow of urine may become very seriously impeded.

Bridle Strictures.—This term is applied to strictures characterized by a duplicature of the mucous membrane which is usually transverse and looks as though this membrane were pinched up or elevated by a thread passed beneath it, so as to constitute something like a

valve. By slitting open the canal in front and behind the stricture, its valvular shape may be seen; but this disappears at once as the knife is carried through it. It is ascribed by some to an exudation of plastic lymph beneath the mucous membrane, which becomes organized and agglutinates the external surfaces of the duplicated membrane, and by others, with a greater semblance of probability, to the cicatrization of an ulcer. Civiale relates a case of the kind, which appears to have been caused by the lodgment of a small calculus which was found just behind it, upon post-mortem inspection. Be their real cause what it may, they are comparatively rare, and their existence has even been denied by some, although long ago described by Charles Bell and since by a number of other authorities.

Excrescences.—The flow of urine may be more or less impeded by granulations, excrescences, or carnosities springing up from the mucous membrane, under the influence of a scrofulous or syphilitic taint, and sometimes without any other evidence of such a state of the system. I recollect the case of a boy about eight years of age, otherwise quite healthy, who presented a fleshy excrescence just within the orifice of the urethra, which gradually increased until it protruded sufficiently to be seized with a pair of forceps, drawn out and clipped off with scissors. A slight hemorrhage ensued; but the obstruction never returned.

Indurations.—The strictures that most frequently claim the services of the surgeon are those which consist of an induration of one or more of the tissues constituting the urethral walls. There is very great discrepancy among authors, with regard to the phenomena which precede or induce these indurations, as well as in relation to the real anatomical condition of the parts thus affected. The most prevalent opinions are that some of these indurations are produced by an effusion into the tissues of coagulable or plastic lymph, which becomes organized and thus adds to the thickness of the tissues—that others result from the cicatrization of ulcers—that in some cases the plastic lymph is exuded upon the free surface of the mucous membrane and may even occasion adhesions as well as indurations. Under all these hypotheses the induration may exist in one or more of the coats of the urethra; yet, while some insist that its seat is most frequently in the mucous membrane, others locate it in most instances in the sub-mucous cellular tissue. It is more probable that in the great majority of cases, the induration exists simultaneously in both the mucous and its subjacent coat, and that it extends to the corpus spongiosum only in extreme cases.

It is not a little singular that notwithstanding the extensive and minute study of pathological anatomy characteristic of the age, so little should be positively known or generally admitted with regard to so simple a point as the *thickness* of the coats thus indurated. Most writers aver that the obstruction is occasioned by an encroachment upon the calibre of the canal, consequent upon the thickening of its wall, or upon the deposit of new matter in these; whereas Reybard declares that he has never seen a case in which there was any thickening whatever, and that the coats are on the contrary

thinner than in the normal state (p. 116.) It must have occurred to all who treat many of these affections, that although the seat of stricture can generally be felt by carrying the finger along the course of the urethra containing a bougie, any marked degree of thickening can be very rarely detected. The author just cited insists that the finger detects the seat of stricture by the induration and loss of elasticity of the part, and not by any thickening. So far as my observation extends, I think this view correct in the majority of cases, though not in all.

The intrinsic nature of these indurations is a matter of much practical importance; but we here also find conflicting opinions. That these indurations appear to be fibrous, and even fibro-cartilaginous, is admitted by all. Are these mere modifications of existing tissues, or are they new products—heterologous formations? According to Cruveilhier, the fibrous element takes the place of the pre-existing tissues; the mucous membrane disappears entirely, and so does the spongy body more or less completely, including, of course, the intervening cellular tissue. And while he admits the possibility of this fibrous structure being the result of inflammatory action, he is rather disposed to look upon it as consequent upon ulcerative destruction, in which case it would be an entirely new product. With Reybard, the indurated element is heterologous from the first inception of a stricture up to its most complete or fibro-cartilaginous development.

Now, what are we to infer from such discordant views entertained by men equally distinguished, as faithful observers of diseased structures? Are we to admit that Hunter, Home, Bell and Brodie, in England, and Ducamp, Lallemand, Amussat, Civiale, and Reybard, in France, could be mistaken with regard to the *thickness* of the urethral walls in strictures? It is unfortunately too often the case that even distinguished men walk in the footsteps of "their illustrious predecessors" without sufficiently verifying the soundness of the grounds upon which they tread. And yet it is only by exposing the errors of those who have gone before us, that progress of any kind can ever be attained. In the present instance, there has undoubtedly been a lamentable deficiency of original and unbiassed post-mortem inspections, and, at the same time, too great a disposition to generalize from a few facts. I believe, therefore, that organic strictures of the urethra may be found presenting every gradation, from mere inflammatory effusion into the tissues, up to the complete substitution of those by a fibro-cartilaginous and heterologous formation; that the tissues may be thickened or not, may be indurated, may be destroyed by ulceration, may be absorbed, and may be replaced by an inelastic fibrous structure. All this is in accordance with what we see in other parts of the body, and we know of no reason why the urethral walls should constitute an exception, due allowance being made for the irritating effects of the fluid (the urine) which must necessarily so frequently bathe the affected tissues. Thus it is that I feel disposed to harmonize or conciliate the observations of pathologists who may have been too hasty in deducing general laws from the

few facts studied by each. This will enable us to reconcile the dogmatic differences of writers with regard to special plans of treatment, and to appreciate the value of each under the various conditions of the disease, instead of blindly advocating any particular procedure as equally applicable to all cases.

Having in these anatomical and pathological remarks confined myself to such points as might have a practical bearing upon the subject under consideration, I may be permitted to omit speaking of the number of strictures that may be found in the same case, of the regions in which they most frequently occur, of their remote and proximate causes, of their symptomatology, &c. Indeed, I do not know that our object would be promoted by the rehearsal of the generally received doctrines upon these branches of the question. I will therefore at once proceed to the examination of some of the principal plans of treatment in common use. These may be considered under the three heads of cauterization, dilatation, and incision.

Cauterization.—In use among the ancients, this plan was not generally resorted to in England until highly extolled by John Hunter and Sir Everard Home; nor did it become popular in France until a still later period, when Ducamp and Lallemand became its leading advocates. But, notwithstanding the potent influence of such high authority, this plan of treatment was on the wane in England when taken by the French, and is now very generally repudiated in both countries by the mass of practitioners. It was at one time much more resorted to in our country than it is now, and I think the tendency of the profession is leading gradually to its abandonment, or rather to its restriction to a small number of cases. I need scarcely observe that the caustic most generally used is the nitrate of silver. I will therefore confine my remarks to this agent. This may be used either as an excitant of new action, which may terminate in resolution, or as an escharotic for the purpose of destroying the morbid tissues. It is true, that one of our best authorities denies it to be an escharotic, in the following language:

“Nitrate of silver has been supposed to act as an escharotic. If this were the case, it would be more likely to occasion than to cure stricture; for it would lead to ulceration, and the reparative process which would follow could hardly fail to cause a narrowing of the canal. The fact is, the only effect it produces is a detachment of the epithelium of the lining membrane, and a softening of the matter which gives rise to the obstruction; in other words, it acts mainly as a sorbifacient, *rousing the absorbent vessels* of the part, and *inciting them* to the removal of the adventitious deposit. The action of this substance is well known upon an exposed mucous surface. If, for example, it be put in contact with the tongue, lip, or palate, it instantly causes coagulation of the natural secretion, slight, almost imperceptible shrivelling of the epithelial investment, and increased discharge from the mucous follicles. *There is never any slough, or destruction of the vitality of the part, however large the quantity of caustic employed.*” (Gross. Dis. Urin., p. 643.)

The italics are mine. It would be out of place here to moot the physiological question of the susceptibility of the "absorbent vessels" to be *roused* or *incited* to the removal of adventitious deposits. But the whole paragraph, and especially the last sentence of the above extract, might mislead the juvenile or inexperienced practitioner into a very mischievous use of the agent in question, either under the impression that nitrate or silver does not occasion strictures of the urethra, or that it is comparatively harmless even in large quantities. The views of Prof. G. are in direct conflict with special experiments and post-mortem examinations made on lower animals, for the purpose of determining the effects of nitrate of silver upon the urethra. (Reybard, 53, et seq.) Lallemand insisted that the caustic should be applied in sufficient quantity and repeated until the whole morbid strictures were destroyed.

Nitrate of silver, I repeat, is used either as an excitant or as an escharotic: when used as an excitant, it is with the hope that by converting a chronic into an acute inflammation of a less obstinate character, the injurious effects of the former may be abated. And it cannot be denied that it has in this way sometimes been advantageous, in urethral as well as in other affections. But we should bear in mind that it is here amenable to the same objections that may be urged against its use in other localities—viz: that it may aggravate instead of benefitting the case. When used as an escharotic, according to the recommendation of its most strenuous advocates, it unquestionably destroys the mucous membrane and sometimes even its subjacent tissue, leaving, as has been abundantly demonstrated, especially by Reybard, a cicatrix tending continually to contraction, and resulting eventually in strictures of an obstinate or of an incurable character. Indeed there can be no doubt that the use of lunar caustic is one of the most fruitful causes of strictures of the urethra. I have repeatedly seen them induced in persons who have never had urethritis, but who had been subjected to one or more cauterizations for the relief of spermatorrhœa. This hazardous practice, become so common in our country upon the authority of Lallemand, should be reprobated, or at least restricted to cases that have resisted all other means; and even then be used with the utmost circumspection.

The observations of Reybard upon the effects of cauterization are so strongly corroborative of my own views, that I beg leave to translate the following passage:

"In the place of the urethral mucous membrane, which the caustic had destroyed along with the cells of the corpus spongiosum, the cicatrix may be seen presenting a brighter and more polished aspect than that of the mucous tissue. It is dense, compact, very resisting and utterly inextensible, as was proven by our ineffectual attempts to dilate the stricture, before and after death.

"These experiments demonstrate that the tissue of urethral cicatrices is very retractile; that its retractility increases as its organization is completed; and that the shortening of the tissue cannot be prevented by attempts at dilatation made during the progress of

cicatrization. I have even observed that the tendency of this tissue to retract was increased by the use of bougies, and that the stricture grew more rapidly when catheterism was practiced twice a day than when this was done but once in twenty-four hours. It is therefore true, that cauterization merely destroys one stricture to substitute in its stead another, often more extensive, more complete and more serious."

"In short, reason, clinical observation, and experiments upon animals, concur to establish the correctness of our views with regard to the formation of organic strictures as a consequence of the destruction of the mucous membrane by ulceration, and especially by cauterization." (Op. cit., p. 61.)

In addition to these objections to the Nitrate of Silver, we may mention the danger of its falling off the instrument while introduced and lodging in the canal; also, the risk of such a degree of tumefaction in the strictured portion of the urethra as to occasion retention of urine more or less serious. It should therefore be avoided, especially whenever the stricture is so great as to impede the introduction of a catheter of medium size.

From what I have said thus far, it is evident that I am decidedly averse to the indiscriminate or even common use of the Nitrate of Silver in these affections. Yet I freely concede that there are cases in which the extreme irritability of the mucous surface offers a serious impediment to the use of bougies, and that in these a judicious resort to gentle cauterization will very happily subdue the irritability and thus materially facilitate the treatment by dilatation. Cauterization should in fact be regarded rather as an adjuvant to dilatation than as a special or radical plan of treatment. With this view, the most convenient instrument for its use is Lallemand's "porte-caustic," or some of its modifications, charged in the usual way and carried into the stricture, rotated and immediately withdrawn. This should only be repeated after the subduction of its effects, which usually requires a few days.

Mr. Henry Thompson's conclusions in relation to the use of caustics are as follows:

"That these agents are never to be employed for the sake of their escharotic or caustic powers, properly speaking.

"That the Nitrate of Silver, lightly applied, exerts a salutary action on the diseased surface of the urethra, relieving inordinate irritability, and checking undue vascularity and disposition to hemorrhage, as it does in similar conditions of the skin and mucous membrane in other parts of the body, and thus it becomes a useful adjuvant to dilatation.

"That the potassa fusa, as a caustic, is considerably more active than the preceding, and is therefore more dangerous of application. If used at all, it should be only in *very minute quantities*, such as fractional parts of a grain, inasmuch as it is exceedingly difficult to limit the action of so powerful an escharotic. It may, perhaps, aid dilatation in the reduction of some strictures, probably by facilitating the solution of some of their component tissues, when care is taken

to employ it in obedience to the condition just named." (Path. and Tr. of Strict. of the Urethra. By H. F. Thompson, F.R.C.S., London, 1854. p. 220.)

(To be continued.)

SOUTH AMERICAN PHYSICIANS.

DR. HILLS—*Dear Sir* :—I take the liberty of sending you an extract of a letter from my friend Dr. M——, of Rio Janeiro, in Brazil, showing some of the beauties of medical practice in that country, which may prove of some interest to you as well as the readers of your Journal.

G. A. KUNKLER.

He remarks : "It is a mistaken idea which many have, that the practice of medicine in the South American States is very lucrative, and many who come to this country with no other object, often find themselves most grievously deceived. I will therefore give you some particulars of a physician's life here.

His customary fee here, as in nearly all South American States, is one *patacon*, or 2000 reis, (about \$1.30,) for each visit. This fee is stationary, and is charged by all. Night visits, smaller surgical operations, dressing of wounds, are all the same price, and only with extraordinary generous patients, or in highly difficult cases, the fee is doubled. One laudable feature in our practice is, that the payment is immediate, as soon as the visit is made; some of the wealthier classes occasionally make a regular contract for one year with the physician, which, however, rarely proves profitable to the latter. In speaking of visits, I must mention that only those in which a prescription is left, are paid for; where only an examination is made, or regimen directed, or the use of the former medicines ordered to be continued, no fee whatever is paid. In what a lamentable position the patient is placed by this custom, I need not stop to explain; as a natural consequence, he is stuffed and flooded with remedies, the physician and apothecary reaping the profit. The fee of an accouchment, (to which however physicians are seldom called,) is half an ounce of gold; in regard to larger surgical operations, it is customary to make a regular contract, and one half of the stipulated fee is paid in advance; good security is demanded for the balance, or it will never be received. Surgery is chiefly in the hands of men (mostly Germans) who travel from one plantation to the other in quest of patients. This practice is the most lucrative, but has also its shady side, as it is not at all unfrequent that the gentlemanly planter relieves the surgeon of his fee, by lying in wait for him with a good knife or gun. Those, however, who are acquainted with this pleasant custom of the country, generally leave after the completion of the cure, without much ceremony, and escape the gratitude of the patient,

by leaving post haste in secret. To apply to the law for redress in nearly any thing, is totally out of the question; partly on account of the miserable manner in which the law is administered, and partly on account of the enormous expense connected with it. In nearly every country it is necessary to remain stationary for some time to obtain practice; here it is different. During the first year you have a regular rush, during the second less, and in the third or fourth, scarcely enough to live upon. Brazilian physicians, therefore, are shifting incessantly from one place to the other, and it is rare to find a man who has been in a place eight or ten years at a time.

For important competitors of physicians, we have here the various saints. If a patient recovers, Saint Anton, or Benedict, &c., &c., receives all the credit and incense; if he die, the whole responsibility falls upon the physician. As soon as a member of a family is taken sick, the *Cappellinha*, a small case containing a crucifix, with the Virgin and divers saints, is brought to the patient, who then makes various promises of donations, to influence them in his behalf.

The superstition as well as the different irrational customs of the country, make the practice of physic very laborious. In entering the sick room, you are nearly suffocated by the fumes of incense, the odor of flowers, &c., which fill the room, (all for the honor of the patron saint.) The patient is always dressed and actually buried in a mass of bed clothing, doors and windows are carefully closed, and the apartment kept quite dark, and scarcely any light is allowed in the room, even while examining the patient. In being called to a female patient, it is considered an imperative duty to examine her abdomen, whether any thing be the matter with it or not; but the feet and other parts of the body are concealed with the utmost care.

Consultations are frequent, but never take place until the patient is in a dying condition. Instead of having them secretly, as with us, they are here considered as a kind of public exhibition; the apartment is therefore always crowded, and all the proceedings are public. The fee for a consultation is about \$2 to \$3 for each physician. Homœopaths are found occasionally, but are patronized indifferently, their treatment not being considered sufficiently energetic. Criminal abortions are very frequent, but the law rarely if ever interferes, although there are persons who make it their trade to produce them. All the general comforts of life command high prices.—*Medical Counsellor.*

TAPPING THE PERICARDIUM.—M. Aran, in Paris, has performed the rare and bold expedient of successfully tapping the pericardium and injecting with Iodine, for the cure of pericarditis and its result effusion.

EDITORIAL AND BOOK NOTICES.

A GOOD JOKE.—The best one of the past month has been perpetrated by the gentlemanly editor, of the Buffalo *Medical Journal*.

After publishing in his own columns a communication signed "R." from Detroit, which had been refused admission into the *Peninsular Journal*, an account of its personal allusions to Dr. N. S. Davis, in which that gentleman in our estimation was treated with undeserved unkindness, the editor of our Buffalo cotemporary intimates that a bloody contest is still going on between us and the originator of the American Medical Association. As that contest, which was originally confined to the representatives of the rival schools, Professor Palmer and Davis, was sometime since terminated by the assumption of a sort of armed neutrality on the part of the journals through which they had spoken, we think the recent allusion of the Buffalo Journal to the subject is a mere manœuvre on the part of the editor, by which he may retreat from the field himself, under cover of the smoke from our batteries, which had already ceased firing.

We should think the motive above imputed to our spirited cotemporary, or else a desire to be mirthful at our expense, had been the occasion of reviving this subject, but for the mischievous manner in which he introduces, in close connection with the foregoing, the remarks of Professor Brainard, of Chicago, on the subject of free education. But as that gentleman, even when he had scientific ends to attain, would only poison his victims in order to show with what certainty his antidote would act, we cannot impute to him malice even if he shoots his Weorara into the vitals of the Michigan University, for we are fully impressed with the belief, that that same quality of heart, which prompted him to rescue the subjects of his experiments from impending death, would compel him to recall and correct any error of opinion he may have adopted or expressed, in relation to the workings of institutions of learning in this part of the old North-west Territory. For this exercise of faith, we have a guaranty in our knowledge of the man and an additional security in the fact, that two of the Alumni of the University of Michigan are co-laborers with Dr. Brainard in the Rush Medical College. Other "arguments" of the same kind are undergoing thorough preparation in the Medical Department of the University, with which the ranks of the Buffalo school can be filled up whenever such emergencies arise, as have called our Alumni into the service of a school in a sister State.

THE HISTORY OF MEDICINE, by P. V. Renouard, M. D. Translated from the French by Cornelius G. Comegys, M. D., Professor, &c., &c. Published by Moore, Wilstach, Keys & Co., Cincinnati.

Having procured a copy of this valuable work from the publishers, at our own expense, we feel at liberty to express an opinion of its merits, without being restrained in the exercise of a becoming freedom of speech, by the apprehension of giving offence to the publishers, if every word included in our remarks should not contain a full measure of praise, as may have appeared to them to be the case on a former occasion, when in noticing "The American Eclectic Obstetrics," published by the same house, we took the liberty of speaking of it, after according to it a good degree of merit, as a literary swindle, and more than intimated, that its compiler had obtained his goods under false pretences, and was in fact a literary pirate, as modern eclecticism is of such a nature, that there is no way for it to live, except by stealing the fruits of other men's labors.

There has been so little written on the History of Medicine, in the English language, that we feel truly grateful to the translator, for having clothed in an English dress this elegant production of the pen of M. Renouard, and made it accessible to the American student. If disposed to be critical, we could find fault with the frequent and sometimes inelegant use of the verb *emit*, and the occasional false rendering of the auxiliary *to have*, which is sometimes idiomatically used in the French language for certain forms of the verb *to be*; but these are too insignificant defects to be taken into the estimate of a work of so much learning and so much merit, as the one under consideration.

The work is too copious to be analysed in a paper like this, and too instructive to remain unperused. We hope, for the love we bear our own vocation, that it will be generally read; and we can assure the reader that he will be amply remunerated for all the time and attention he may devote to the antiquities, the mysticism, the philosophy and the erudition of his profession.

Z. P.

ANNUAL MEETING OF THE MICHIGAN STATE MEDICAL SOCIETY.—Owing to the removal of the Secretary, Dr. E. Andrews, from the State, it becomes the duty of the undersigned to give notice that the next annual meeting will take place at the medical rooms of the University, in the city of Ann Arbor, on the last Wednesday of this month, in the forenoon. A full attendance is desired.

Z. PITCHER, President S. M. Society.


PORTRAIT OF THE LATE DR. DANIEL DRAKE.—We have received from different sources, the *Western Lancet* and the *Cincinnati Medical Observer*, very excellent and life-like sketches of the features of this indefatigable student, the latter being not only a correct likeness, but a fine specimen of art.

The annals of medicine in America furnish few names more closely identified with its literature, than Dr. Drake's, and in the West, we know of no one, whose contributions have done so much as his to entitle medicine to the public confidence and its votaries to social respect. The lineaments of his face should not only be preserved, but the productions of his pen should be embalmed in the memory of every student, who would do well to strive to imitate the zeal and energy which actuated him.

If the memoir of him by Mr. Mansfield, and the eulogy by Prof. Gross, could be generally read by students of medicine, a strong incentive to mental effort would be planted in the mind of many a youth, capable of achieving distinction, who might otherwise live and die in obscurity, for want of such impulsion.

ANOTHER MEDICAL JOURNAL.—The *Medical Independent*, we believe, is the title of a new journal, the first number of which has just made its appearance on the tables of some of the physicians of this city. We have not yet seen it, but report says, it makes a creditable appearance. It is edited, we are told, by Prof. H. Goadby, F. L. S., Prof. Kane, and Dr. L. G. Robinson of this city, and published by Elwood & Co.

DR. REID'S METHOD.—The *Medical Counsellor* publishes an extract from a letter to the editor from Dr. Jno. T. Plummer, in which the writer, referring to Dr. Reid's method of manipulation, &c., says: "I commenced practice in 1828, and from that day to this I have used no other mode of restoring the bone to its place than that described by the correspondent of the *N. Y. Journal of Medicine*." If this is so, it was certainly a most reprehensible neglect of duty in Dr. Plummer in not making known his method to the profession. A man has no more right to keep back from the public a discovery in surgery by which suffering may be ameliorated, than he has in medicine.

 Copies of the Transactions of the American Medical Association for 1855 can be had by applying to Dr. Brodie. Price \$3.00.

THE PENINSULAR
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AND THE COLLATERAL SCIENCES.

VOL. III.

APRIL, 1856.

NO. X.

ORIGINAL COMMUNICATIONS.

ARTICLE I.

Supreme Court.

THE PEOPLE, *ex rel*, ELIJAH H. DRAKE,

vs.

THE REGENTS OF THE UNIVERSITY OF
MICHIGAN.

The relator, a private citizen, in the name of the People, obtained an alternative mandamus calling upon the Regents to show cause why they do not appoint a Professor of Homœopathy. Their return sets forth a claim that the relator has no right to appear in the matter, and also a claim of right in the Regents to act in their own legal discretion in the appointment of Professors and the management of the University affairs, beyond the control, in this regard, of the Legislature. It further shows that, while not admitting the right of the Legislature to interfere, the Regents, out of respect to their expressed wishes, appointed a committee last Spring to take the subject into consideration, and correspond with the various institutions in Europe and America, to ascertain the feasibility of uniting such a professorship with the existing college, and how, if feasible, it can best be done; and where the best man can be found; and that the Committee have not concluded their labors. That from the antagonism between the systems, they

cannot act wisely in the matter, if they are bound to act at all, without full deliberation.

To this return the relator demurs.

I.

The relator is not competent to sue out a mandamus against the Regents. If they have been guilty of a legal offence, they must be prosecuted or pursued by the public authorities or some person directly injured. The applicant here is not injured individually.

Even the English cases, which are relied upon, do not establish such a doctrine as is needed to support this complaint. The relators there are always found to have some personal claim or right, distinct from that of being a citizen of the realm. No case can be found there which has allowed a private citizen to interfere with the public boards of the kingdom, where he has not been directly and individually damaged.

And the absence of authority to this point is the more important, because there is no public prosecutor in England, and all offences are followed up by private prosecutors. In this State it is made the duty of the public prosecutor *in all cases* to act, and only the Attorney General can represent the people in this Court.

II.

The writ, being in the sound discretion of the Court, and not a writ of right, will never be issued in a case where the public good does not require it.

And there are several good reasons why the Court should not interfere, even if it has the power.

1. Because there is no pressing necessity apparent.
2. Because the delay is not unreasonable.
3. Because the interference would be disastrous.

1. It does not appear that there has been any inconvenience suffered by reason of no appointment having been made. It does not appear that students have been prejudiced who are now in the University, or that any have been kept away who were desirous of going to be taught the Homœopathic theory. And the interference of a Court where no damage has been done would be an extreme exercise of power.

2. The Regents have taken the course which prudence dictates if there were no doubt of the right of the Legislature to interfere. The University is established, and all its medical departments filled, upon the received system. It is not denied by any one that the Homœopathic system is utterly at war with the present state of things. The professorships as now organized under the existing laws, were estab-

lished to give a complete medical training, and are all necessary to the system. They cover the same ground with the proposed professorship, and their teachings are diametrically opposite. They were adopted on mature deliberation to complete and carry out the trust and power created by Congress. To bring in at once a change so complete as that desired, would lead to inevitable confusion. If it is possible to have the two systems together it can only be possible by hedging about the school with the most careful guards against confusion and abuse. A mistake now made, would lead to most deplorable consequences. And in settling a matter which is designed to be perpetual, by the Statute providing for it, the Regents would deserve the severest reprehension, were they to act precipitately, and bring about evils which more delay might palliate and perhaps avert.

Unless the law should prescribe a particular time within which the Homœopathic professor should be appointed, (as it has not done) the Regents must have some discretion about it, depending on the nature of the duties laid upon them. And, if we admit the validity of the law, it is manifest that the duties of the Regents are not so clearly defined under it as not to *require* the exercise of judgment. The professorship created is that of "*Homœopathy.*" What is such a professorship to embrace? It is of course claimed by the followers of this school that it provides for all the hygienic wants of the community. If so, it embraces as many departments as the old system. Are all these departments to be attended to by one professor? If this be so, then the act is no great boon to the votaries of that school. One professor could not attend to all branches unless very superficially and generally; and he could not by such attention do anything towards preparing students for practice according to that plan. The college would afford no facilities whatever, under such circumstances, except to students preparing for the regular system. And if the law (or its framers, rather, for the law is entirely vague) designed to provide for more full instruction on some particular portions of the theory, the determination and selection of these portions must be left to the Regents.

Their discretion is then to be exercised, and severely taxed likewise, in all of these matters. They must first determine in what manner the two systems can be brought together with the least likelihood of injurious collision. The return shows they have been diligently and anxiously inquiring into this, and that they have as yet received no light. If they have taken time, they have needed time; and will need much more to harmonize such radical differences. When they

have discovered that which in their judgment will be the least dangerous method of embracing these things, they are called upon to decide what part of Homœopathy shall be taught. The difficulty of this is apparent, and very great. A board of Homœopathic Regents would probably find the selection no easy or peaceable work. When these preliminaries are settled, they will have to select a competent professor. They are bound to choose one who is learned in his profession and apt to teach. Since practice has been thrown open, and the title of Doctor is assumed as often as it is bestowed, it will require circumspection to find a candidate having all the proper qualifications. The writ of mandamus is only granted to set public bodies in motion, and the Regents have begun to act and cannot under any circumstances be blamed for having been too careful in coming to a conclusion on such a subject.

But from the entire antagonism between the two systems, it is almost certain that the introduction of this new and discordant element would utterly destroy the harmony and usefulness, and probably the existence of the medical college. And it would be a violent exercise of the discretion of this court to exercise its extraordinary prerogative to destroy the prosperity of a valuable State institution.

It is no part of judicial duty to pass upon questions of science, but it is within the province of the Court to look beyond the wording of its process to its natural and inevitable effects, and to determine whether those effects are such as to demand, in order to produce them, the action of the Court, where that action is not *compelled* by the rules of law.

At the time when the University was founded, this now so-called *science* of medicine was in existence, and had been for many years. The Legislature, in carrying out the design of the Government appropriation, must have regarded the existing state of medical science, in order to elect what system to incorporate in the University. At that time, besides the regular system, there were the homœopathic, the botanic, the hydropathic, the eclectic, and the steam schools or theories—and perhaps some others. In disregarding all these for the plan which accorded best with human experience, the Legislature exercised the discretion vested in them, and intended that there should be no material change. The whole institution has been built up on the plan thus originated; and if, under it, all interests are not sufficiently cared for, and all ideas sufficiently consulted, nevertheless, as all plans are more or less defective, it should be enough that the plan selected will carry out substantially some one consistent method, acceptable to the

mass of the community. And if a contrary one cannot be introduced without confusion, it is reason enough for refusing to disturb the one adopted.

And in examining the subject, it will not be amiss to compare the two systems—not strictly on their merits, for that would be extra-judicial—but in relation to their capabilities for satisfying the greatest needs of the public. The Homœopathic theory professes to act upon one fixed law, to which is to be referred the treatment and cure of all diseases. And it is the peculiar boast of that system, that the singleness of nature is its crowning merit, because free from uncertainties and contradictions. Whether this be true or not, it may not be for this Court to say; but if it be so, then of course it becomes a very serious question whether the rule announced is that one certain maxim or not. And this result follows, from the adoption of the Homœopathic claim, namely, that all other systems are totally and radically wrong, and can have no soundness whatever. Homœopathy is consistent in denying toleration to every other school. And if it be admitted into the University, it must be upon the confessed claim that its Professor shall inculcate it upon his pupils strenuously that the doctrines taught them by his colleagues are necessarily and entirely wrong. That any school can live amid such conflicts is impossible.

They would destroy the efficacy of both systems. The student would be left to grope his way in utter uncertainty. It is no answer to this, to say, (as has been said by counsel for the relator) that these students are men and not boys, and should exercise men's prerogatives of thinking and selection. Whatever be their ages, their business at the University is to receive instruction; and they do not go there to listen to matters on which they have no need of guidance. It is the office of a school or college to furnish this guidance, and if it be uncertain it is worthless. This instruction, embracing, as it does, only the teachings of observation and experience, is not of a character to be obtained without reliance on the instructor. Medicine is not to be learned or criticised by intuition; and the loftiest intellect, unlearned in the gathered lore of the profession, is not to be trusted with the treatment of disease.

And there is nothing in the principles or practice of the existing school of medicine which will prevent it now or hereafter from embracing the principles of Homœopathy, if they should prove themselves true by the test of experience. The medical art is one which does not profess to have attained completeness, but adds to its methods and remedies daily and yearly such things as approve themselves to

the profession by their success and efficacy. There is nothing in that art to exclude Homœopathic remedies from the same benefit of trial which is accorded to others. And the fact that the medical system has been so improved within the last century that of those who are attacked with diseases an infinitely larger proportion are restored now than formerly, shows that there is nothing likely to prevent the adoption of any real improvement. About the time when Hahnemann started his project, Jenner brought forward his theory of vaccination, which was certainly no more promising in its beginning than any other new idea. But it was not ten years before the whole medical world adopted it; and yet at this day, in Great Britain and Europe, more than ninety-nine hundredths of the educated physicians continue to disregard Hahnemann's theory; although having the same chances of trial and investigation. The same liberty of choice which opened the door to Jenner, and the multitude whose new ideas have been received upon fair experiment into the sum of medical knowledge will, it is presumed, embrace the views of Homœopathy, if those views are established by experiment. And the fact alluded to, which statistics abundantly prove, that not only has the average duration of life been increased, but the average of cures of the diseased has been greatly enlarged, shows that human life is greatly indebted to the medical profession as it is, whatever may be the chances of further improvement. And the improvement already made is as much a settled fact in history and medical jurisprudence as any other matter of which all men are supposed and reasonably presumed to be cognizant.

If it be argued, (as it has been) that the regular school of medicine is exclusive and bigoted, and will not receive improvements which originate elsewhere than with its own physicians, there is no difficulty in showing the utter injustice of such charges. And in this, not only general history, but the traditions of the law may be appealed to. While Homœopathy asserts its dignity as a science founded on a newly discovered universal law, Medicine does not profess to have any other basis than the accumulated experience of ages. Inasmuch as every valuable human institution, including all law, learning, civilization, liberty, arts, sciences, commerce, and whatever gives prosperity to the race, have a similar origin, it is none the worse for that. There can be no unchangeable law for beings full of eccentricities and idiosyncracies. And when such laws are laid down, in matters of physical or political ailments, they may be very safely regarded as false in both.

Whence is this medical experience drawn? certainly not from the

learned merely. The experience of the ignorant has been seized upon and followed, when proved, as readily as that of the wise. Women have contributed their quota to it. Wherever civilization has triumphed over barbarism, the curative remedies of the savage have been among the spoils of the conquest. From age to age the stock of medicinal substances has been added to, by articles which no science could have selected alone. To numerate instances would be an endless labor. There is hardly a crude vegetable or mineral substance whose medical virtues were not first proved by the unlearned and poor, who in turn were led to use them by observing their effects upon birds and animals.

If there be any difficulty in admitting the Homœopathic theory into the medical system, it arises not from the character of its founder or his followers, but from its being a theory entirely incapable of verification by such tests as are known to human experience, or within the range of human faculties. And we submit that no Court can safely lend its aid to establish or sustain a theory which would put at defiance all of the resources of medical jurisprudence, and all the rules of evidence known to the law. It is an important dogma of Homœopathy that medicines are potentized in proportion to their attenuation. For example, it is held that if a grain of any medicinal substance be diffused through an infinite ocean of fluid, a drop of that fluid, or a globule moistened in it is a more potent remedy, than a drop out of Lake Superior would be if the grain had been dissolved in that insignificant body of water. If a physician were called upon to testify what drug had been administered to a sick man, or what mineral had poisoned a murdered man, chemistry, and often mere taste and smell, could enable him to testify understandingly, where the dose is in visible quantities. But it passes mortal powers to detect by taste or smell or sight, or the subtlest chemical or microscopic tests, whether the ocean into which a globule has been dipped is medicated with a grain of aconite or pulsatilla, and whether, therefore the administration of it will produce swearing or piety. (Jahr's manual pp. 3. 468.) No homœopathic physician can tell, by any of those means on which human testimony is founded, what medicine he administers. If a roguish or careless boy confuses the labels, no human agency can distinguish the nostrums. It is needless to advert, in connection with these absurdities, to the question whether a grain of any substance is so minutely divisible that every drop or every bucket of a medicated ocean must needs contain even an infinitesimal portion.

Medical science is of daily use in jurisprudence, and even if this

court could under any circumstances feel authorized to use its discretionary power to promote confusion and discord in the University, the peculiar nature of this theory, and the facilities it affords its professors to slip out of all legal responsibility, and defy the scrutiny of all rational testimony, should determine the matter.

But there is another important element in the case. The University fund is held not as a State bounty, but to support and carry out a sacred trust, of which the State is merely a trustee. If a private trustee were to abuse his powers and endanger the trust committed to him he would be at once prevented. It cannot change the nature of the case that the State is here the trustee. The trust rests in a solemn compact which no power can revoke, and no Court should permit to be violated. If the tendency of a measure is to destroy a trust, it cannot be legalized simply by calling it by a name not indicating its destructiveness. The Court is now asked by the relator not merely to stand by and let the State violate its duty, but to aid it by active co-operation.

The attempt now made is equivalent to declaring that all students of medicine in the University shall have daily lessons from one in authority contemning and denouncing the principles taught by all the rest of the faculty, and opposed to the views of a very great majority not only of physicians but all others. It is equivalent and must necessarily lead to the utter destruction of the establishment. If courts refuse to interfere, by injunction, with great public works in progress, until the right has been settled in a trial at law, there is infinitely more reason in refusing to interfere to the destruction of a public institution much more valuable to the community than any scheme of private emolument.

Even were the Attorney General to interfere in this form, he should be remitted to an information or indictment, either of which would bring up, on a regular issue and trial by due process of law, the true merits of the case.

III.

The Legislature had no power to pass the act requiring a Professor of Homœopathy to be appointed, and it is therefore void.

The Constitution of 1850 provided that the Regents should continue to constitute the corporation known as the Regents of the University of Michigan. It also provided that the Regents "*shall have the general supervision of the University, and the direction and control of all expenditures from the University interest fund.*"

Constitution, Art. 13, §§ 7, 8.

It becomes therefore a serious inquiry how far the Regents have power over the University, and how far the Legislature has ceased to have such power. And this involves examination into the state of the university law at the time the new Constitution was adopted.

Congress having at various times made provision for the endowment of a University, the former State Constitution and articles of compact with Congress made some general provisions for the preservation of the fund. And to carry these provisions into effect, the Legislature of 1837 adopted a law, entirely re-organizing the University to conform to the new state of things, and declaring in detail its whole system and corps of professorships in all departments. It establishes three grand departments—1st, Literature, Science, and the Arts; 2nd, Law; and 3rd, Medicine.

L. 1837, p. 102.

In each of those departments it provided for several professorships, and left the determination of the necessity of filling them at any time with the Regents. In carrying out their discretionary powers, the Regents had fully organized the departments of literature, science and the arts, and medicine.

Upon an examination of this law which had been left unaltered until the Constitution was enacted, it will be found that if the University had been a private corporation, the statute would have been a sufficient charter to provide wisely for its whole corporate existence. The Regents were entrusted with the whole management of the institution and of its income. They selected professors, determined when professorships should be filled, fixed their salaries and prescribed their duties. No provision was made for legislative interference in its management; and it is manifest that none was intended. The legislature had, of course, the *power* to amend or change the law, but they never designed or contemplated that the management of the university should be interfered with by any one but the Regents. This act was intended as an execution of the power and trust declared by the general government, and for a full execution of it. The sale of the lands and investment of the proceeds were provided for, under the control of the legislature, but the *income* of the fund—all that could properly be used for the institution—was put in charge of the Regents.

And in this connection it is proper to look at the design of the founders in establishing the University. It was intended, as a University, to provide for the three great divisions of secular education

—theology being out of the question in a state institution. (And yet, if the doctrine of the relator be correct, all objections to introducing theology would be obviated by providing for the teaching of every variety of doctrine. The harmony thence resulting may be imagined.) The department of Medicine was of course kept in view as one of the necessary parts of the system. Some general idea must have existed at the time, how that department was to be organized. The intention of Congress and of the State might have been carried out—though perhaps not wisely—by creating an unalterable private corporation, providing for free education.

And how was medical science then regarded? The United States government had medical boards for the examination of physicians and surgeons for the army and navy—adhering rigidly to the existing order of medical science. This state, and probably every state in the Union had provisions of law not only recognizing that system, but protecting the public against quackery and empiricism.

L. 1833, p. 555.

And in this state, until a comparatively recent period, no man could practice as a physician unless qualified by examination and approval of the medical societies.

Sutton vs. Facey, Manning R. 243.

And the case of *ex parte Paine*, 1 Hill, 665, shows that the Supreme Court of New York, felt authorized, under the same state of the law, to regard the practice of Homœopathy as quackery.

It is very plain therefore, that when the University was endowed and founded, the medical teaching contemplated, was such as is now carried out in it; and that Homœopathy and all other irregular systems were excluded. Whether wisely or unwisely, this course was adopted; and while the legal disabilities of practioners of all schools, were subsequently removed, no change was made in the university course, although in 1846 the law of 1837 was a third time republished. The policy was wise which preserved it, for different and conflicting elements cannot consist with the prosperity of a college.

The new constitution therefore, found the University fully provided for, and organized on a definite theory. It found the Regents possessed of general powers covering, to the fullest extent, the right to determine when professors were needed, and when the funds of the University would support them. If their powers were to be left at the control of the legislature, and they to be its ministers merely, in carrying out legislative provisions, where was the propriety of saying anything about them in the constitution? It would be little short of

ridiculous to insert provisions securing the names and titles of officers, when their powers were altogether unpreserved. It would matter little who administered duties requiring no judgment or discretion. And if the construction claimed by the relator is to prevail, the legislature have all the real power over the University. If they can say that a new professorship is needed, and shall be filled, there is no prohibition or hindrance to their appointing to it. If they can, as they have attempted in the act of 1851, to which this is amendatory, declare for what purposes the funds may and may not be used, they may equally fix the professor's salary and define his duties. They may still farther proceed and re-arrange the whole system of study, and turn it into any course, wise or foolish, which they may desire. They can establish and fill professorships of pro-slavery or abolitionism, or any other nonsense which demagogues may bring forward as pet measures. And what meanwhile is the power of the Regents? If they cannot determine or can be prevented from determining how many and what professors the University needs, and the compensation which should be paid them; if they can be compelled to change the course of study and government in the institution, what is there left? Where, after these things are done is their *general supervision* of the University? Where is their *direction and control of expenditures* from the University interest fund? If a constitution can be deemed so foolish as to provide unchangeably for a board of men, who are to have no power whatever, then is a constitution of very little value.

If there were any objection to the exercise of the former powers, or enlarged powers by the Regents, there might have been reasons for withholding the power, but even then it would afford no excuse for perverting the meaning of the clause in question. But there existed no such objection. The power had been granted and exercised for thirteen years, and the legislature had seen no reason for curtailing it. It was no greater in extent than the authority exercised everywhere, without complaint, by the trustees of private colleges and universities. It was a power which from its nature ought reasonably to be vested in some body of men, capable from immediate connection with, and personal supervision over the institution, of determining readily and correctly from time to time, all that its changing necessities required.

But there are additional reasons sufficient to justify any extent of authority, which the constitution might vest in the Regents. Their appointment is changed from the nomination by the Governor

to an election by the people, from whom both, governor and legislature, derive their existence ; and their term of office is increased to three times the term of governor or legislature. And it would be inconceivable that all this trouble should have been taken to invest the Regents with new dignity and exemption from control in their appointment, while, at the same time, they were to be made in effect mere puppets of the powers from whom they had just been freed.

Taking the fact that in the former constitution the form of government of the University was not prescribed with the other circumstances of its legislative history, it appears impossible upon any ordinary rule of construction, to suppose that in providing for the election of Regents for a long term, and giving them supervision of the University and control of its interest fund, any power was reserved to the legislature over these matters. There is no reason for distrusting the Regents, and none for disturbing the existing order of things.

And when we look at the policy of the constitution touching the legislature, there is the strongest ground for denying any such power to them as is exercised by the acts of 1851 and 1855.

The act of 1855 has nothing of ordinary *legislation* in its character. It is an administrative act purely, and such an act as the Regents were already authorized to perform in regard to any unfilled department—the law department for instance. It is an act which the Regents, from their direct and intimate connection with the institution, could perform with judgment and knowledge ; while the Legislature could not possibly be possessed of such an insight into the interior affairs of the University as to judge wisely upon it. It was never contemplated by anybody that the Legislature should step down from its proper position to perform those duties which can only be properly performed by boards or individuals. The whole scope and tenor of the Constitution will be found at variance with any such practice.

The legislative power vested in the Legislature is far from omnipotent. It is made subject, directly and indirectly, to many exceptions and restrictions. The bill of rights of the first Constitution contains some provisions, which may be regarded as mere enactments or positive restrictions. But it contains others, which are declarations of principle underlying all government, and which are there stated in terms as political axioms ; and among others is the declaration that all political power is inherent in the people, as also the purposes for which Government is instituted. These cannot be regarded as abrogated by the new Constitution, which is a creature and continuation

of the old one. It is only such powers as are essential to a government based upon those declared principles, that are conferred on any department of State authority.

The legislative power is further limited and restrained by a declaration that the executive and judicial powers shall be kept separate from it, whereas in England and in most governments, while this distinction is nominally kept up, yet the *power* of Parliament is not deemed to be subject to any such condition. And here, while the executive power is in its principal functions vested in the higher officers of state, yet the same principle, which renders it improper to interfere with those, equally requires that the Legislature should abstain from all acts of the same kind. And administrative functions come clearly within that rule. It is proper for legislation to make general provisions for the government and organization of any corporation, but to interfere in its management is not strictly or properly performing legislative functions, and could only be justified anywhere by the theory that all undisposed of and ungranted powers are in the Legislature as the residuary grantee. And courts should not, we submit, assume these powers to be in the Legislature if they can find any other body properly organized to exercise them.

It is very evident that the new Constitution was designed to *restrict* the legislative powers as far as it could be done safely. Provisions are profusely scattered through it, showing a distrust and aversion to entrusting the Legislature with the same powers they formerly possessed. And some of these provisions are of a singular character. The restrictions and conditions, which have been there imposed, are some of them as follows :

The yeas and nays are to be given and recorded on the passage of all laws, and all votes or nominations are to be *viva voce* and published. These clauses are intended to fix individual responsibility. They are limited to biennial sessions, and in those receive pay for a limited period, and are restricted to a small stationery allowance. They are debarred from holding other offices, and from becoming interested in State or other public contracts. They are compelled to legislate by separate acts for all separate matters, and to express the object of each act in the title. And they are to adjourn at *noon*.

Why these provisions were adopted, and their intention, every one knows who has lived a few years in the State.

These provisions would render it impossible for the Legislature to give their attention to such matters of private or local interest as were formerly within their legislative province. Consequently there are, as might be expected, provisions showing that, as far as possible, they

should be confined to general and public business. They are also forbidden to allow private claims, to make special laws for the sale of private property, or to alter roads. They are authorized and expected to give powers of local legislations to counties and other municipalities. In short, it appears throughout that the Legislature were expected to attend to legislative business only, and many of the objectionable log-rolling projects were prevented.

Why the language giving the Regents their powers, is to be restricted and destroyed, so as to vest or leave in the Legislature a power of meddling in the internal management of the University, when in all other matters there is such a clear desire manifested to relieve them from local duties, it is hard to say. And the plain language of the Constitution itself cannot well bear such an interpretation. Supervision means the exercise of skill, discretion and opinion; not the mere obedience to rules. The Regents are not taken from the control of the appointing power, and made responsible over to the people, with any view to curtail their powers. Their supervision is not one for which they are to be responsible over to the Legislature, or in which they are to be under the direction of the Legislature. Supervision is a larger power.

And the terms used concerning the University fund are equally at least, if not more extensive. The Regents have "the *direction and control of all expenditures* from the University interest fund." The Legislature in creating the Homœopathic professorship and requiring it to be filled, certainly did not intend it to be filled without salary. What right had they to direct such an expenditure from the fund? What right had they so far to control the fund as to use for this purpose what may be needed for something else?

The effect of allowing the unfounded claim of the Legislature is to nullify altogether the authority of the Regents, and make their office contemptible. It is to allow the management of the University to be perverted, so as to destroy their well laid plans and confuse all their system. It is to give them no right to avert what they have every reason to regard as a deathwound to the institution. They are made as unimportant as if they were subordinate ministerial deputies, instead of a board appointed under the express provisions of the Constitution to do all that is required for the University. For beyond its general supervision and the direction and control of its funds, we cannot perceive what residuum of authority could be found by a plain man to exist in it or over it.

J. V. CAMPBELL.

G. V. N. LOTHROP.

ARTICLE II.

Case of Menorrhagia—Hysteritis, Peritonitis and Pneumonia supervening.

HOMER, M. T., February 20th, 1856.

MESSRS. EDITORS:—I have lately been treating a case of disease, which from the rarity of its occurrence and from some peculiar symptoms which have marked its course, I deem worthy of publication. On the 20th day of January, I was called on to visit Miss N. M., and learned that upon that and the preceding day she had been affected with chills and fever, but had no perfect intermission. She was suffering from pain and tenderness of the stomach and bowels, and much pain in the back and loins, tongue somewhat furred, face flushed, considerable headache. Upon further inquiry, I learned that, for a week past, she had been flowing profusely, and that she never had been regular, the menstrual molimen, coming on at intervals of one, two or three weeks, and being frequently attended with menorrhagia. She had not been troubled with Leucorrhœa. Her appetite has been very capricious of late. The present attack was said to have been brought on by exposure in getting the feet wet. I prescribed a purgative dose of Calomel to be followed by Castor oil, Sinapism to the stomach and loins, warm bath, cold to the head.

21st. Flowing as bad as ever. The Calomel operated in two hours, so that the oil was not given, apply cloths wrung out in cold water to the bowels and upon the vulva, Sinapisms to the spine. She has had no chills since yesterday, but has had flashes of fever which were relieved by cold sponging. Bowels loose.

22nd. Patient badly salivated. The flowing still continues in spite of the cold applications. R. Morphiæ Sulph., gr. $\frac{1}{2}$.

Plumbi Acetas, grs. 2, to be taken every three hours. To-night had been fixed as the time of her *marriage*, and she could not be prevailed upon to put it off. She, therefore, got up, and was dressed and prepared for the ceremony. On the same night, there was a ball in the house, and I was attending a very difficult case of obstetrics, in another part. The excitements of the evening, as might be expected, made her worse.

23d. Found her suffering a good deal. Pulse 110, much difficulty of breathing accompanied by a cough, pain in the right side, severe headache, much distress in the stomach and bowels, and pains in the loins extending down the right hip. Directed the nurse to wash her all over with saleratus and water. This gave her much relief. Ap-

ply Sinapisms alternately upon the stomach, bowels, small of the back, and between the shoulders.

R. Opii.

Ipecac. aa., gr. i.

Plumbi Acetat. gr. ii.

} to be taken every three hours.

24th. Patient much easier. No pain in the bowels, or hips, or back. The flowing has ceased. Still much uneasiness in the stomach, and soreness of the chest. She has had two or three turns of Epistaxis. Leave off the sugar of lead, and take Dover powders every three hours, wash the mouth with slippery elm mucilage.

25th. Still improving. Continue the prescription.

26th. Much worse this morning. Pulse 120. Great pain in the bowels. Had a consultation with Dr. Cole of Winona Diagnosis, inflammation of the Uterus, Prognosis rather unfavorable. R. Morphine, one gr., every six hours. Tartar Emetic, in sufficient quantity, to keep up a constant nausea. Strong Sinapisms, Fomentations to the bowels. After the first dose of Morphine, pulse sank to 110, but it soon rose again to 120.

27th. Pulse 125 and still increasing. Gave a large dose of Morphine, pulse still increasing. Concluded to take blood from the arm. Took about ten ounces. Pulse sank to 120. Ordered Castor oil and Turpentine. Patient threw it up immediately. Continue the Antimonials. Pulse rose through the day to 130, 135, 140, 145. Floccitatio, Subsultus tendinum, muttering and starting from sleep, delirium. Towards night, pulse sank to 130, 125, 120, 115. Patient sweats considerably.

28th. Patient did not rest well last night. Pulse 128. Jactitation, Formication, Subsultus tendinum, excessive thirst, Tonsilitis with earache. Sees double, pupils contracted. Purple spots about the face and neck. Low muttering delirium. R. Morphine, i gr., every four hours. Hot Pediluvia. Strong Sinapisms. Keep up the influence of the antimony.

1 P. M. Pulse increasing again. Palpitation of the heart. Face alternately purple and pale.

9 P. M. Pulse 146 and full.

12 P. M. Catching in her breath.

29th, 12 M. Pulse 140. Countenance anxious. Suffers much pain.

2 P. M. Palpitation with faintness and cold extremities. Apply Sinapisms to the inside of the legs, and give a large dose of Morphine.

7 P. M. Pulse sank to 124, and diaphoresis again occurred.

30th. Pulse 135. Rusty sputa, constipation. R. Calomel, two grains, every two hours. Spirits of Nitre, one teaspoonful three or four times a day. Continue the Tartar Emetic.

1 P. M. Pulse 116. Patient feels better.

3 P. M. Pulse 123. Purple spots upon the face. Palpitation. Does not like to be disturbed. Lies with feet drawn up. Says she does not feel much pain. Soak her feet in hot water. Give a dose of Castor oil. This produced a motion of the bowels.

31st. Pulse 113. Coughs a good deal, but raises easily. Pulse sank to 108. Tongue cleaning off nicely. Pulse rose to 118 in the afternoon, and sank to 110 at night.

Feb. 1st. Pulse 122. Feels very sore. Has had no passage of the bowels since yesterday. Gave her Castor oil. Make a sack of hops and apply wet with hot water, to the abdomen.

12 M. Pulse 110. Giddiness, faintness, nausea, chills. Give her a little Camphor occasionally.

6 P. M. Pulse 117. R. Antimony and Spirits of Nitre, every hour. Take a dose of Morphine at 9 P. M. and 3 A. M.

Feb. 2nd. Pulse 118, face pallid, legs drawn up, tongue furred.

12 M. Pulse 122. Sonorous rale very loud in both lungs, loudest in the left. Giddiness and faintness. Continue the prescription.

Feb. 3d. Pulse 125. Peritonitis less diffused. Rale louder in left lung, becoming moist in the right, Rusty Sputa, quite tenacious. Pulse sank to 112. Same prescription.

Feb. 4th. Pulse 95. Patient has been very sick from the use of the Antimony, and sweats profusely. Appetite returning.

Feb. 5th. R. Calomel, grs. 8, to be followed by Castor oil. Pulse 106.

Feb. 6th. Pulse 127. Lips dry and cracked. Teeth covered with brown sordes. Inflammation confined to the region of the womb, which appears as a tumor five or six inches in diameter. Patient is again salivated, a very little Calomel produces this effect. She is breaking out in several places with pustules, like tartar emetic sores. Can it be that the internal use of Antimony has produced this effect? * After this, the Patient continued to improve, but the

* The pustular eruption, observed in this case, has been observed by others. In the St. Louis Medical and Surgical Journal for Jan., 1856, Dr. L. Ch. Boisligniere reports four cases of "Pustular eruption on the skin from the internal use of Tartar Emetic." Of its mode of action, he remarks as follows: "To sum up, we think that antimony cures pneumonia, in producing on the mucous membrane of the lungs a toxic and substitutive action, which is occasionally made manifest even on the skin, as exemplified by the above related cases of pustular eruption."

pulse still remained frequent for some time. Now, in this case, several considerations naturally arise. First as to the real cause of this disease. Could the Menorrhagia be brought on by exposure to cold, or was it a case of abortion? The patient stoutly denies the latter; and yet there is a great deal of gossip in regard to the case.

I am, of course, anxious to vindicate the reputation of my patient, if possible. I can hardly see, however, how cold could produce menorrhagia. Every one knows that the effect of cold is generally a suppression of the menses, and not menorrhagia. Again, what was the cause of the attack of acute Hysteritis? Was it, in consequence of the use of Acetate of lead checking the discharge too suddenly? You will see, by referring to the history of the case, that it was not stopped suddenly. Again, the frequency of the pulse from first to last appears to me rather remarkable, and the eruption of pustules is another peculiarity. I submit the case for the consideration of Physicians.

Yours, with respect,

JOHN C. NORTON.

ARTICLE III.

Observations on the relation of the maternal and fetal vascular systems constituting the zonular placenta of the carnivora—Strongylus gigas, its habitat and history.

MESSRS. EDITORS:—As human *pathology* as well as *physiology* have received much elucidation in points of great obscurity, from comparative researches on the inferior animals, perhaps the following observations may also be utilized in the domain of human experience.

Desirous of ascertaining by independent observation the relation of the maternal and foetal vascular systems, constituting the zonular placenta of the carnivora, and feeling some doubt, based on previous observations, of the accuracy of the statements of Eschricht and Sharpey, the writer obtained a bitch at the seventh and eighth week of gestation, and having first, from motives of humanity, placed her under the full influence of chloroform, opened the abdomen on the mesial line, and fully exposed a well developed uterus on the surface of the abdomen. It was found to contain four large foetuses, occupying symmetrically the large cornuæ and small corpus uteri.

While yet alive, although profoundly anesthetized, the uterus was plied with mechanical stimuli, but there resulted no responsive contractions. In experiments on other animals, the writer has witnessed distinct peristaltic action from similar causes when the animal was recently dead, but not from chloroform.

Was the organ itself, or the inferior medulla spinalis, here so thoroughly anesthetized, as to be incapable of reaction?

Whichever hypothesis we adopt, the fact furnishes a practical suggestion of some importance. In a few minutes after, the heart of the animal ceased to beat. But before this event, the fœtuses were seen to gasp as much as an infant gasps and struggles for air, while yet in utero, from pressure on the cord, in prolapse of the funis.

This respiratory effort continued for half an hour after the death of the dam. We infer then that the fœtal dogs did not expire from the immediate effect of the chloroform given to the mother.

The cephalic and the pelvic extremity each presented toward the os uteri in two cases.

Writers on comparative parturition have generally stated that the head presents *almost uniformly* in mammalian gestation at term, and this statement has been employed in supporting and opposing conflicting hypotheses, relative to the cause of the normal position of the human fœtus, by writers on human parturition.

Unfortunately, however, the fact assumed is of very questionable variety. Whatever may be true in regard to uniparous females, in all my observations on the multiparous genera of Rodents, as Squirrels, Rabbits, Mice, and also of the carnivorous genera *Canis* and *Felis*, the presentations of the pelvic and the cephalic extremities have occurred with nearly equal frequency.

The determining influence of fœtal form, in relation to the containing cavity, in fixing the attitude and position of the fœtus, would seem then to be sufficiently established.

Two of the fœtuses were then removed from the uterus, the abdominal and thoracic cavities exposed, and an effort (unsuccessful from defective apparatus) was made to force a fine injection into the fœtal side of the placenta.

Attention having been attracted to the thoracic viscera, the left ventricle of the heart was found still to contract rythmically after the lapse of an hour and a half from the death of the dam. The right ventricle and both auricles had ceased to contract, and could not be excited by mechanical stimuli.

This persistent irritability of the heart of the fœtal mammifer is

in harmony with the reptilian grade of its existence in utero, and probably necessitated by the feeble oxidation of the liquor sanguinis derived from the mother.

This vital tenacity of the foetal heart supplies also a physiological basis, for the continuance of our efforts at resuscitation in cases of still-birth, more especially as the general vital affinities of the mammalia establish a parity of physiological condition. Obstetric writers generally regard the incomplete ossification of the cranial vault of the human foetus as a special adaptation related to the size of the cerebral mass; but in these canine foetuses, also in those of the cat, and even in the common chick, at birth the sutures are not yet closed, and, in the last named, this condition obviously could have no reference to the facility of parturition.

On opening the abdomen, a parasitic worm was seen, lying free upon the surface of the intestines. It was about seven inches long, and was immediately recognized as the male of the *strongylus gigas*. The extremity of another was soon detected in the same cavity, and tracing its form led to the region of the kidney, the well-known habitat of this species of *Strongylus*.

In moderate traction, the anterior part of the body was extracted from that organ. Measured after death, it reached three feet in length and six lines in diameter.

On further inspection, the kidney was found to be converted into a membranous sac by the great distension of the pelvis, and almost complete absorption of the proper renal tissues. This sac, which, both to the touch and sight, presented an irregularly undulating surface, was occupied by two other similar parasites, measuring eighteen and twenty-eight inches respectively.

These three individuals were females. The colour of those found in the sac was crimson, that lying partly free on the peritoneum was yellowish green, the color being derived by absorption from contact with the bile cyst and the liver. The ovaries and uterus were distended with an almost inconceivable number of ova, about 1-200 of an inch in length, and 1-300 in diameter. The entire length of the generative tract was probably not less than seven or eight feet. Prof. Owen estimated the number of ova in the *ascaris lumbricoides* at the fearful sum of sixty-four millions, but even this is probably much exceeded by our specimen of *strongylus*.

The development history of this prolific parasite has not yet been clearly traced, nor its migrations fully ascertained.

Prof. Owen, Siebold and others state that they have found the

foetus fully formed in the ovum in the uterus or terminal segment of the generative tube, while those of the ovary or narrow part of the same tube were yet occupied by the granular matter of the vitellus. In the mature state, the embryo is stated to be clearly seen coiled up, through the transparent coats of the egg, at which time it bears a striking resemblance to the *trichina spiralis* that infests the muscles, with which Prof. Owen suggests it may yet be found to be identical.

The exclusion of the ova is believed by Rudolphi and Owen to take place through rupture of the parietes of the body and uterus, but their further history until found, always in small numbers and only in the kidneys, has hitherto eluded research.

Under a good *Oberhauser*, the ova of our specimens taken from the uterus, presented the usual granular aspect of the vitelline substance, but, when compressed, they were distinctly seen to have taken the first step in the process of segmentation, being composed of two equal *nucleated* masses.

Dujardin states that the species is very rare, having been found only about once in three hundred dissections of dogs, wolves and other large quadrupeds. Observation, however, leads me to the conclusion that in this country it is far more common, having met with it, in at least half the number of dogs I have examined.

The other kidney presented nothing abnormal, either in *size* or structure. The animal was in good condition and lively, and did not appear to suffer annoyance or experience pain from the ravages of the hideous parasites, a circumstance probably due to the gradual progress of the changes produced.

S.

ARTICLE IV.

Nux Vomica as an Aperient.

WM. BRODIE, M. D.

Dear Sir:—The February number of your journal is received. Allow me to add a few words upon "*Nux vomica as an Aperient.*"

For fifteen years or more, I have used this article for habitual costiveness, but usually with other tonics. A pill composed of Alcoholic Extract of *Nux vomica*, from one third to two thirds of a grain, and about double the quantity of Sulphate of Iron, taken three or four

times a day, has answered my expectations in the less obstinate cases. More frequently, however, three or four tea-spoonsful of a mixture of Compound Tr. of Gentian one part, and F. Brandy or good old spirit three parts, in sweetened water, has been taken to wash down the pills. In the more obstinate cases and those of long standing, the good effects of this course may not be perceived under a week or fortnight after its commencement, and should it become necessary to move the bowels in this time by other means, a strong infusion of Cinchona—made by adding a pint of boiling water to an ounce of the coarsely powdered bark, and letting it stand scalding hot in a covered vessel, without boiling, one hour, and taken at the rate of half a tumblerful (4 or 5 ounces) three times a day—will answer this purpose without resorting to ordinary cathartics. Possibly, in some very obstinate and protracted cases, it may be well for a few days in the outset, and before the other medicines have had time to exert their effects, to add a few grains of Pulv. Rhubarb to this infusion; or a small quantity of Aloes may be incorporated with each pill, for the same purpose. Other laxatives, except those mentioned, only tend to increase the difficulty, and should be sedulously avoided; and even these should be used only when laxatives are indispensable, and for the limited time specified. The other medicines—the pills and the bitters—should be continued till the functions of the bowels are restored; indeed, till their natural healthy peristaltic action is confirmed. Both patients and physicians are too apt to] discontinue medicines in chronic cases, at the very earliest period at which it seems possible to dispense with them. Where the general health has suffered considerably from this state of the digestive organs, the medicines have been continued six months, and even a year, with obvious and constant improvement all the while.

Perhaps some other tonic may be advantageously substituted for the Sulphate of Iron in the pills, as Salicine, or some of the chemical preparations of Cinchona, or some of the other mineral tonics.

Neither the tonics nor the small quantity of Alcohol are to be omitted where there is pain or tenderness in the abdomen. But here Opiates will be found an important addition in the treatment. They allay pain, remove the tenderness, and promote rather than retard the peristaltic action of the bowels.

By this treatment the abdominal secretions are restored with as much certainty as by Mercury. Indeed, it is in such cases that Nux Vomica has been supposed, and I doubt not with some foundation, to promote the biliary secretion as effectually as Mercury. Even when

it is desirable to act more directly upon this secretion, the vegetable articles that possess this power, of which we have several besides *Nux vomica*, are to be preferred. With due deference to yourself, and Dr. Pitcher and Dr. Mettauer, I have long since ceased to use Mercurials in such cases as well as other cathartics, believing them to interfere with the accomplishment of what seems to me the most important indication, viz. to restore the natural sensibility and tone to the digestive organs. For the same reason I have discarded Alkalies. The effect of these to lessen digestive power, may not be very apparent, unless they are taken for a considerable time and under such circumstances as to test their powers in this respect, when it will be obvious.

Cases of habitual costiveness, in which cathartics had been taken repeatedly and for a long time, not only without benefit, but with the effect seemingly of rendering their repetition more necessary, were, in my early practice, among the most annoying. What the pathological condition may be on which this depends, we shall perhaps never know precisely, unless the microscope can reveal it to us; and till then we must be pardoned for adopting a practice in such cases that may be regarded as wholly empirical. I confess my inability to explain satisfactorily, either the condition of the organs or the *modus operandi* of my treatment; and all I can say in favor of the latter is, that the success attending it has been satisfactory thus far. I am well aware, however, that there are but few things in medicine less reliable than one's own satisfaction with the success of his practice. Hence it is necessary to add that several of my professional neighbors have pursued a similar treatment in such cases and with alike satisfactory results. Indeed, the use of *Nux Vomica* in this complaint did not originate with me, but was suggested to me by a man of high standing in the profession, now dead, some fifteen years ago. I trust that its use will not be received with less favor by American physicians, from the fact that it originated in this country before it was taught elsewhere.

In conclusion let me say, that I was pleased with the article in your last number, to which, what I have here said, may be regarded as a supplement. Every one who deserves the title of a physician or a reputable standing in the profession, has some points on which he is competent to give some valuable practical information; is daily obtaining new facts and new views to guide him in adapting his remedies to particular cases. Let such lay aside their modesty, and consider it a duty that they owe to the profession, to make short

communications to the journals setting forth their peculiar views and the results of their experience. Cases of common and every day occurrence may, even more than extraordinary ones, furnish topics for useful suggestions. If this practice were to become more common, medicine might be as much improved by it as by the pathological researches that engross the attention of so many physicians at present. Leaving this thought for others to pursue for themselves, I will conform to my own ideas of propriety in regard to the length of such communications.

Respectfully Yours,

J. CHURCH.

SPRINGFIELD, MASS, February 23d, 1856.

We admit the above article from the pen of Dr. Church with the greatest of pleasure, and have merely one remark to make, viz: that, although the writer is convinced, that in the section of country where he resides, Mercurial alteratives are unnecessary, yet experience distinctly points out, that in this region they cannot with any degree of safety be omitted, and, probably for some time to come, must enter into the composition of a large share of our prescriptions.

W. B.

ARTICLE V.

We had hoped to have given the opinion of the Court as delivered by, Chief Justice, but it was removed from the city before we were aware of the fact. We therefore give below the substance of the opinion as drawn up for us by Jas. V. Campbell, Esq., for which courtesy he well please accept our thanks :

1. In a matter which does not concern individual rights, but is purely of public concern, (and this case is such,) an individual has no right to apply for a mandamus on behalf of the people. The English authorities sustain no such proposition as that a person, merely because he is a citizen of the realm, may apply for a mandamus to redress public grievances. And while there are one or two American authorities countenancing a different doctrine, the weight of authority is against allowing private interference. Under our laws there are public prosecutors whose duty it is to take all proper measures to redress public evils, and there is no propriety in permitting private

persons, without authority and without the responsibility which rests upon the sworn officers of the State to assume their functions, and to become officious in the prosecution of what they conceive to be public wrongs. The Attorney General is the proper person to appear in this Court and make application for a mandamus in a case of this nature.

2. The writ of mandamus is a high prerogative writ, not demandable of right, but issuing only in the sound discretion of the Court. This discretionary power will not be used except in cases of necessity or high importance, where an abuse has been committed which calls for the interposition of the Court. The facts in this case show that the effect of the action sought by the relator, would be to introduce a system antagonistic to that now in the University, and one which may be destructive of it. The Regents show that they have had the subject under consideration, and have instituted inquiry and conducted an extensive correspondence with a view to satisfy themselves concerning the best manner in which the proposed system can be introduced, if at all, and the most eligible candidate for the professorship, if created, and are still engaged in the same investigations. This Court cannot disregard their answer, and it is a sufficient response to the application. The Court cannot see that necessity for its own action, or that neglect in the Regents to do their duty, which must exist before they can properly be subjected to a mandamus.

SELECTIONS.

ON THE TREATMENT OF STRICTURES OF THE URETHRA.

BY L. A. DUGAS, M. D., &C. &C.

(Continued from page 428.)

Dilatation.—The treatment of strictures of the urethra by means of dilating instruments, is not only one of the most ancient methods, but also that which has most effectually resisted all attempts to supplant it. It is rational, safe, usually painless, not repugnant to the patient, and of more general applicability than any other. The instruments in most common use for this purpose are bougies, which may be made of various materials. We need notice, however, only those made of metal, gum-elastic and waxed linen. The gutta-percha

bougie is apt to break, and should be repudiated. The cat-gut soon becomes rough and unfit for use.

The *waxen bougie* is a great favorite with some of the most skillful surgeons, who resort to it for the double purpose of taking an impression of the stricture and of subsequently dilating this. I must confess that I think the importance of the explorations made to obtain an accurate knowledge of the size, shape, &c., of the strictured portion of the canal, by means of the wax bougie, has been very much exaggerated, and that the data thus obtained, are indeed of little or no value in the treatment by dilatation, although they may perhaps aid us in determining the direction and extent in which incisions should be made when these are deemed necessary. Any stricture that is permeable may be treated by dilatation, and I do not see how this can be facilitated by a knowledge of the peculiar shape of the stricture. The waxen bougie is so inferior to the metallic for dilatation that I never use it for this purpose.

There are various objections to the *gum-elastic bougie*: it is very difficult to keep during summer, in this climate, however well made; it deteriorates very soon by use; there are very few cases in which it can be as easily introduced as the metallic instrument.

The *leaden bougie* is, I think, very decidedly the best in use. It is durable, may be shaped to suit the views of the operator, is sufficiently dense to exercise advantageous compression upon the tissues, and is of easier introduction than any other. A very simple experiment will serve to show the relative facility with which the different kinds of bougies may be introduced. Let a waxen bougie be held with a certain degree of force between the fingers and thumb of one hand, while an attempt is made with the other hand to draw the instrument through the grasp. Note the degree of resistance offered, and then repeat the same experiment successively with a gum-elastic, a steel, a silver, and a lead bougie. It will be at once perceived how much more firmly the fingers adhere to the wax than to the lead, and consequently how much greater is the force required to move the former than the latter—the resistance diminishes in the order in which we have just enumerated the materials. The leaden instrument may, therefore, often be introduced with ease, when those made with other materials have been tried unsuccessfully. It is so much superior to any other that I have used it almost exclusively for a good many years.

It should be remembered that leaden bougies are sometimes made hollow, and that they are then easily broken. Having seen some very ugly accidents resulting from their fracture within the canal, I think that none but the *solid* ones should ever be used. The solid instrument, moreover, retains its shape better, is more dense, and its weight facilitates its introduction.

The treatment of strictures of the urethra by dilatation may be either *gradual* or *rapid*, but the former method is that in general use and approved by judicious surgeons. *Rapid* dilatation, by means of bougies, may be effected either by using conical instruments, carried down with as much force as may be deemed prudent by the ope-

rator, or by the introduction, in rapid succession, of bougies of increased diameter, as advised by Benique, or, finally, by the use of instruments invented by Perreve, and variously modified by others, consisting of two blades, which may be separated, more or less, after having been passed into the stricture.

If mere dilatation were the sole object of the treatment, the objections to the *rapid* method would still be very great; but when we recollect that a stricture thus dilated is by no means cured, that the indurated tissues or products of morbid action must be removed by the slow process of absorption, and that the treatment must be continued sufficiently long to prevent a reproduction of the disease, it must be conceded that rapid dilatations is entirely inadequate to these ends. It must be acknowledged that there is something fascinating in the idea of relieving a strictured patient in a few days, and sending him home impressed with the belief that an affection, perhaps of years' standing, has been thus so summarily disposed of. The conscientious practitioner should, however, beware how he be lured by such fair promises; for this practice, like most others entitled to the designation of *heroic*, is not without danger. But let us hear the language of others, lest we be suspected of prejudice; I quote from Thompson's Prize Essay:

"Great mischief may very easily be done by rapid dilatation on any method—a proceeding, the exercise of which has been sufficiently reprobated. The semi-elastic constituents of a stricture must be gradually dilated if an efficient result is to be attained. Inflammation of the urethra and bladder, which, in patients laboring under chronic disease of the kidneys, may readily extend to these organs and be followed by fatal consequences, has been not unfrequently induced by neglecting this rule. Moreover, rupture of the urethra may be produced by rash treatment, an occasional consequence of which, even when the lesion is only slight in extent or degree, is the occurrence of phlebitis and purulent infection, with collections of pus in different parts of the body. Mr. Coulson, of St. Mary's Hospital, has recently called the attention of the profession to the connexion which exists between these causes and effects, having collected and reported twelve cases in which laceration of the urethra by sounds and lithotrites has been so followed. (*Lancet*, 1852, vol. 1, p. 562.) In these the disease appeared within a few hours after the use of sounds or bougies: in four cases for the dilatation of organic stricture; in four for the removal of fragments of calculi, chiefly in connection with lithotrity; and in the remaining four for various other purposes, as enlarged prostate, retention in gonorrhœa, &c.

"Three such cases also have come under my own personal observation; of these, two were due to dilatation of stricture, and the other followed the operation for lithotrity. It is an instructive fact, that in almost all these examples the effects in question have followed efforts to dilate the urethra which have been carried to a considerable extent, i. e., just as the maximum amount of distention has been reached, or when an operator has attempted, in the treatment of an old stricture, to dilate to a degree beyond what has been his previous

habit, although perhaps only to an extent of one or two sizes of the catheter scale." (The Path. and Tr. of Strictures of the Urethra, by H. Thompson. London, 1854, p. 197.)

Keybard, who advocates the rapid dilatation in some cases, after stating his plan of procedure, adds: "But it is very rare that we find strictures sufficiently distensible to yield to as rapid a process of dilatation as that just mentioned. In most cases in which I have dilated the stricture thus promptly, the walls have yielded only after being lacerated, either at the beginning of the operation or upon the introduction of a bougie of four or five millimetres diameter. This laceration is produced without much force, and for the most part without being known; but if the surgeon have his attention alive to the fact, he will always recognize its occurrence by the peculiar sensation transmitted through the bougie, by the sharp pain experienced by the patient, who will complain of a sense of tearing or rupture, and by slight hemorrhage. Subsequently the patient feels a scalding during micturition, larger instruments are more readily admitted, and a muco-purulent discharge occurs; all of which symptoms concur in establishing the fact of laceration.

"Even very distensible strictures can therefore be dilated but slowly without laceration. Indeed, in most cases, the operation of dilatation can be repeated only at intervals of several days without incurring the risk of laceration, of the febrile paroxysms so common in such cases, of inflammation of the urethra and its attendant blennorrhagic discharge, of inflammation and suppuration of the sub-mucous tissues, and of urinary fistula." (Translated from *Traite Prat. des Retrecissements du canal de l'Uretre*. Paris, 1855. p. 227.)

The treatment by dilatation is of course only applicable to permeable strictures. It is true that impermeable strictures may, by the use of caustics or cutting instruments, be opened so as to admit a bougie; but this does not invalidate the position that permeability is a necessary condition of the treatment by dilatation, for the bougie must be introduced before it can dilate. The plan I usually pursue, is to introduce as large a lead bougie as the passage will admit without violence or pain, and allow it to remain at first only a quarter of an hour. This operation is repeated only once a day, morning and night, increasing the size of the instrument as fast as this can be done without pain, and prolonging its retention to an hour. With a little instruction, the patient is very soon enabled to introduce the bougie himself, so as to lessen the frequency of professional visits. It is important, however, to caution the patient very particularly against the use of too much force or the infliction of pain, for I have repeatedly known accidents produced by their over anxiety to hasten the process. A safe rule of action is to avoid giving pain by the operation. I am in the habit of increasing the size of the bougie, until a number ten or twelve can be readily admitted, and then of gradually lessening the frequency of introduction and time of sojourn. It should be inserted often enough to prevent any tendency whatever to a return of the contraction, and although this may be at first necessary every day, it will soon be sufficient to repeat this only every second, third,

or fourth day, and then weekly. But even after all seems to be perfectly safe, the patient should be fully and freely apprized of the great liability of such affections to return, and of the importance of detecting such a tendency as early as possible. This can only be done by occasional explorations, say once a month, with the bougie of largest size, when the slightest difficulty of introduction should be met by a return to the same treatment as before adopted.

Chills, followed by high fever, are not unfrequently occasioned by the use of bougies, however carefully managed, and should be arrested at once by the free use of quinine during the first intermission, lest they prove fatal, as is so often the case in those countries in which the advantages of quinine are less understood than in this. These paroxysms constitute what the French designate as "*fievres pernicieuses*," the synonyme of our "*malignant intermittents*." It is difficult to understand why such serious general disturbances should be induced by so trivial a local irritation, and it is equally incomprehensible that there should exist such striking analogy of pathology and treatment between the effects of a cause purely traumatic and those of one essentially atmospheric. I have seen patients who had never had a paroxysm of intermittent fever before, suffer most violent attacks of this kind after the introduction of a bougie conducted with the utmost care and without the slightest laceration. Arrested by quinine, the attacks would return upon the repetition of catheterism. The same has doubtless been the experience of all practitioners. I should remark, however, that this febrile tendency may be overcome by keeping up the effect of quinine after the arrest of the paroxysms and until the system becomes accustomed to the bougie. The administration of a pill of two or three grains of sulphate of quinine, morning, noon and night, for eight or ten days, and the introduction of the bougie once a day, for fifteen or twenty minutes during this time, will usually accomplish the desired toleration. I am under the impression that gentle cauterization of the affected portion of the canal with nitrate of silver once or twice, lessens the liability to constitutional disturbance in such cases, by blunting the sensibility of the affected locality, even though this may not appear to be unusually developed. I would therefore advise a resort to it upon the occurrence of a chill or febrile paroxysm.

I need scarcely state that the rapidity with which dilatation may be safely effected varies exceedingly, according to the nature of the stricture itself, as well as the general susceptibilities of the patient. While some considerable obstructions to the flow of urine may be abated in even a few days, others, which appear at first to be comparatively slight, may prove remarkably refractory, and consume weeks and even months in the treatment. It is therefore out of the question to fix upon any rule which should apply to all cases indiscriminately. The reputation of the surgeon, as well as the interests of the patient, require that the treatment be conducted as expeditiously as the circumstances of the case may permit, with a proper regard to security; but the judicious and conscientious practitioner will, at the same time, avoid the temptation of reaping laurels at the expense of undue

risk to the patient. He will feel that he has done his duty when he has removed the disease without accident, although he may have subjected himself to the imputation of timidity or want of energy. We should, of course, in all cases, proceed as rapidly as may be safe.

Incisions.—The incision of strictures of the urethra may be made from within or from without; that is to say, by reaching the obstruction through the canal or through the skin. The internal incision may, moreover, amount to mere scarification or involve the tissues to a considerable depth. Internal incisions are advocated by surgeons under widely different circumstances, for while some think it proper to resort to them in the great majority of cases, others restrict their use to instances alone in which the passage of a bougie is very difficult or even impossible. All, however, agree in the use of bougies afterwards, or, in other words, make the incisions initiatory to dilatation. The advocates of a general resort to these incisions as preliminary to the use of bougies, insist that they thus economize time and make the cure more effectual, whereas the opponents of this plan believe that it is less radical, or permanent, than simple dilatation, and that the disease is consequently more apt to return. Incisions undoubtedly facilitate very materially the use of bougies, and enable us in a few days to pass instruments of a calibre such as might have required weeks of gradual dilatation for their admission; but I am with those who think that the disease is much more apt to return when thus treated, than when the obstruction has been removed by the absorption provoked by dilating instruments. The use of the cutting instrument is, moreover, not always free from difficulty as well as danger, especially when the stricture is situated about or beyond the bulb of the urethra. We have to encounter by this process the dangers of false passages, and of urinary infiltration as well as of purulent infection, to say nothing of hemorrhage, which although very rare, does sometimes become serious. Notwithstanding these objections, however, to incisions as a general practice, we are free to admit that cases are generally encountered in which the induration is so extensive or unyielding that it becomes necessary and highly proper to resort to them, even though the stricture may occupy the membranous portion of the canal. I should observe, however, that, if the stricture be impenetrable, the induration should be reached from without; that is to say, by external incision, as this is both more easy and less hazardous.

Mr. Thompson expresses himself in the following manner upon this point: "The attempt to perforate an obstruction otherwise impassable, by pushing a pointed blade into it without a guide, must be always somewhat hazardous; extremely so, if it be attempted in the curved part of the urethra, for however cautious the operator may be, the blade may be most readily pushed out of the urethra into surrounding structures, and infinite mischief may result. Hence I feel bound, unhesitatingly to discountenance the use of all curved instruments constructed on this principle, and if it ever be necessary to apply a 'lancetted stiletto' without a guide (which I have never had occasion to do), its employment should certainly be limited to that part of the urethra which is quite movable, and where its direction can be

controlled somewhat by the assistance of the hand not employed in directing the instrument. Less dangerous is it, as we shall hereafter see, to lay open the perineum and divide the stricture from without, thus giving free vent to noxious fluids of all kinds, than to wound the urethra from within, at or behind the bulb, as we run great risk of doing, when operating at six inches distance from the external meatus, and thus only make a channel for these matters into the erectile cavities and other structures around." (Op. cit., p. 224.)

I have deemed it proper thus to add the weight of Mr. Thompson's authority to my own, because of the less cautious views advanced by one of the most enlightened surgeons of our own country. Professor Gross, after advising internal incisions in "old, firm and unyielding" strictures, adds: "And why should there be any hesitation or doubt concerning this operation? Where are its dangers, or the difficulties of its execution? I confess, I cannot see any; and in making this remark, let no one regard me as a visionary enthusiast. What I say is not speculation, but the result of personal observation; not prejudice, but actual experience at the bedside. It is only when the stricture is situated far back, in the membranous portion of the urethra, that the method is obnoxious to objection. Under such circumstances, especially when the obstruction is nearly impermeable, or when it is accompanied by a tortuous condition of the urethra, there may, I admit, not only be danger in attempting division, but the operation requires an amount of skill and anatomical knowledge which few men possess. But even here, the well directed efforts of the patient and persevering surgeon will generally be crowned with success. To the unskilful alone is the operation a stumbling-block; to the ignorant, foolishness." (Op. cit. p. 730.)

The instruments used for internal incisions consist of a canula containing a silet, with a blade, more or less near its extremity, which may be projected in front or in the rear of the stricture, so as to cut from before backward, or from behind forward. There are various modifications of these "urethrotomes," to suit the views of the operator. Indeed they are so numerous, that it is not always easy to name the author of any one that may be presented to us. They are all, however, constructed upon the same general principles. Some are straight and others curved, and the blade is so situated as to cut forwards, backwards or laterally. Some are intended merely to scarify, whereas in others the blade projects sufficiently to divide the whole thickness of the urethra, and even the adjacent tissues. Those recommended by Stafford, Dr. Physick, Thompson, Civiale and Ricord, will meet the exigencies of most cases.

A catheter of gum-elastic should be introduced into the bladder immediately after such incisions, and allowed to remain several days, or until a sufficient organization of plastic lymph has taken place, to prevent the bad effects of the contact of urine with the cut surface. Subsequently it will be necessary to use bougies (metallic) to maintain the opening effected by the incisions, if not to increase it.

I have already intimated, that even with the aid of such scarifications or incisions, many strictures will be found to return, sooner or

later, after the discontinuance of the treatment. M. Reybard, however, has of late advanced the opinion that, if the incisions be made sufficiently deep, the disease may be radically cured; and, inasmuch as his views have been sanctioned by so able a body as the French Academy of Medicine, I beg leave to present a brief notice of them. In so doing, I will present a portion of the report made to the Academy by the Committee who awarded the Argenteuil prize to M. Reybard, in 1852, for his Treatise on Strictures of the Urethra. The members of this committee were M.M. Bouvier, Gerdy, Grisolle, Huguier, Larrey, Laugier, Ricord, Robert and Roux.

“Urethrotomy consists, according to M. Reybard, of an internal incision extending not only through the stricture, but also through the whole thickness of the urethra walls. The two bleeding surfaces thus produced must be kept asunder so as to be separately cicatrized, and in this manner a new surface is added to what remains of the circumference of the canal, which increases its diameter, and remains permanent. This operation is therefore very different from mere scarification. M. Reybard was led to adopt this method by a study of the cicatrization which follows longitudinal incisions of the urethra in lower animals. He found that these wounds, when prevented from uniting, terminated in the formation of a polished, thin and non-retractile cicatrix, which, added to the parietes of the canal, increased its extent.”

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“Before practising urethrotomy, the patient should be prepared for it, by dilating the stricture so that it may admit the introduction of the urethrotome. If dilatation be too tedious or too painful, scarification should be resorted to.

“The urethrotome used by M. Reybard consists of a canula with a slit in its whole length, and containing a bladed stilet, which may, by a simple and ingenious mechanism, be projected so as to divide the urethra from behind forward.

“Whatever be the shape of the stricture, the incision should always be lateral, because the walls of the canal are here less thick, and we thus avoid the arteries of the bulb which are situated inferiorly. The section should include, as already stated, the whole thickness of the urethral walls; and even if carried beyond this, there would be no harm done, as there is no important organ near. The depth of the incision may be approximatively estimated at five or six millimetres (from two to three lines), and its length should be about six centimetres (about two and one-third inches,) the stricture occupying its centre. The longer this incision is made, the easier will it be to keep its edges separated.

“In order to secure the separate cicatrization of the surfaces of the wound, M. Reybard merely keeps them apart with dilating instruments carried into the urethra, but without exercising any painful compression. For this purpose he uses a double-branched metallic dilator, or a mercury dilator similar to the air dilator of Arnolt or of Ducamp. This instrument should not remain in the canal so as to cause irritation, but should be daily introduced for a few minutes

during the twenty-five or thirty days usually required for cicatrization.

“The following are the phenomena observed during this process of cicatrization. The incision of the urethra is immediately followed by a bloody discharge which gradually diminishes during four or five days, and finally ceases as the inflammatory process closes up the cells of the divided spongy tissue. This discharge is followed by an oozing of matter, at first sero-sanguineous, and subsequently serous and sero-purulent, which continues until complete cicatrization. It is only in exceptional cases that true suppuration occurs.”

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“The edges of the incision, being separated each day, will heal separately, and if care has been taken to carry the division through the whole thickness of the canal and to make it sufficiently long, the cicatrization will occupy not only the edges of the wound, but also the bottom of this or the space resulting from the separation of the edges. This portion, which M. Reybard terms ‘the intermediate cicatrix,’ is formed externally to the canal and rests upon the subjacent cellular tissue. If the wound does not suppurate, the cicatrix will be polished, thin and devoid of the retractility peculiar to the cicatricial tissue.”

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“The accidents to be apprehended are, hemorrhage, urinary infiltration, febrile paroxysms, inflammation, and death.

“1. *Hemorrhage*.—Urethrotomy is, as we have already said, always followed by a discharge of blood from the divided spongy body. This continues for three or four days; but is rarely abundant enough to constitute real hemorrhage. In a series of thirty-two cases this accident occurred ten times. It did not take place in the two cases operated upon by your reporter some months since at the Hopital Beaujou; but in one of these a slight bloody oozing persisted upwards of two months whenever the patient made efforts of stool.

“The hemorrhage does not always occur immediately after the operation; it may show itself only at the end of several hours, or even days, and especially during the night, in consequence of erections. In nine cases it ceased spontaneously; in only one case did M. Reybard deem it proper to control it by compression applied along the urethra. When it coincides with paroxysms of fever (which is most frequently the case), the surgeon should not interfere too soon, for the bleeding is then advantageous and tends to prevent inflammation.

“It is not uncommon to see an ecchymosis produced by the infiltration of blood in the cellular tissue of the penis, scrotum and perineum. This phenomenon is unimportant and will disappear spontaneously or under the influence of resolvents.

“2. *Urinary infiltration*.—It would seem that this accident ought to be the necessary consequence of a deep incision of the urethra. Observation, however, proves that such is not the fact. M. Reybard has ascertained that the urine flows through the canal without penetrating the cellular tissue, when care is taken to prevent a coagulum of blood from forming in the wound. This is done by passing into the urethra for the two or three first days a bougie or a catheter whenever

the patient wishes to urinate. The danger of such an accident lessens as we recede from the period of the operation, and as the inflammatory action progresses.

"3. *Febrile Paroxysms.*—Those who are operated on, often experience during the two or three succeeding days slight febrile paroxysms, which M. Reybard thinks may be usually attributed to the painful contact of the urine with the wound. But sometimes these paroxysms are exceedingly violent and assume a malignant character, such as may be observed occasionally after other operations upon the urethra.

"In our summary of thirty-two cases of urethrotomy, febrile paroxysms occurred in twelve, neither of whom died. The malignant type showed itself twice, and required the sulphate of quinine in large doses. The same remedy was equally useful in two other cases less severe; and in the eight others, the fever being milder, yielded of itself. The author thinks that this occurrence may generally be obviated by catheterizing the patient as often as necessary during two or three days after the operation, and thus preventing the contact of urine with the wound.

"4. *Inflammation.*—The inflammation which follows urethrotomy is less intense than one might expect from a wound so extensive and deep; it is indeed usually less than that which follows scarification. M. Reybard attributes this difference to the circumstance that the dilating instruments introduced into the urethra after the latter operation exert a much more considerable tension of the divided tissues than they do after urethrotomy.

"5. *Death.*—It is well known that death may result from the simplest operations upon the urethra. It has been seen to supervene very soon after the mere introduction of a bougie or catheter. M. Blandin observed it after one single scarification. (See Mem. de Reybard, obs. de Joly.) M. Civiale cites (Memoire sur l'Urethrotomie, p. 97) another case of death at the Hospital des Veneriens, the result of one scarification. It is, therefore, not surprising that urethrotomy should also occasion it. We should, however, observe that this fatal effect rarely follows this operation, inasmuch as it occurred only once in thirty-two cases, and that even in this case extraneous circumstances may be found to account for its fatality."

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"Having indicated the accidents that may be occasioned by urethrotomy, we will now show the final results of this operation. Among the patients operated upon by M. Reybard, there are several whose cases could not be followed up, and of whom we can therefore say nothing. But the last work of this surgeon contains 8 cases in which the condition of the patients was verified a long time after the treatment by means of explorations with a ball-headed bougie, the only instrument which enables us to ascertain with exactness the relative dimensions of the different portions of the canal.

"Your Committee of 1845 had already seen one of M. Reybard's patients ten months after the operation, whose urethra was found to remain as large as it was after the incision, although he had ceased to

use bougies for six months. (M. Gerdy's Report.) Of the eight cases reported by M. Reybard, seven were his own, and one was communicated by M. Valette, surgeon of the Hotel Dieu of Lyons. This last especially remarkable, for the patient had three strictures with fistulas in the perineum and inguinal region, and for twelve years the urine passed entirely through these fistulous openings. The persistence of the cure was verified twenty months after the treatment, at which time the urethra readily admitted a bougie of 8 or 9 millimetres. The seven patients operated on by M. Reybard were seen by practitioners of established scientific reputation, who have testified to the cure of each over their own signatures."

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"*Appreciation.*—What first strikes us in the work of this surgeon is the boldness and novelty of his operation. Never, indeed, until now, have intra-urethral incisions been made so extensive and upon such sound principles. Another fact, equally certain, is that this operation has solved the problem of the radical cure of fibrous, thick strictures, involving sometimes the whole thickness of the urethral walls, and which have, until now, resisted the most varied and persevering efforts. By the extent of the incision, which is carried beyond the indurated tissues, and by the separation of its edges which is kept up, urethrotomy secures a large, polished and non-retractile cicatricial surface, formed at the expense of the morbid as well as healthy tissues of the urethra, and which is essentially different from that resulting from the development of fleshy granulations.

"The authentic facts of which we have given a summary, demonstrate that the cures thus obtained may be lasting; yet we do not think that such happy results should always be looked for. We regard a relapse as possible, or even probable, when high inflammation takes place in the wound and renders inevitable the development of fleshy granulations. In this event, the cicatrix, instead of being polished, thin and non-retractile, will be similar to those resulting from suppurating wounds—will possess, as these do, more or less retractility, and therefore be capable of reproducing the urethral obstruction.

"It cannot be denied that urethrotomy is a serious operation, and that it may occasion grave accidents; but, on the other hand, let us remember the prognosis of urethral strictures in which this operation may be used; let us bear in mind the series of infirmities and sufferings which embitter and abridge the life of such patients; and then let us decide whether, under such circumstances, it is not proper to resort to an effectual plan, although the cure has to be purchased at the expense of some danger. For my part, I am far from wishing to apply M. Reybard's method to all strictures of the urethra; but there are some of these which I would resolutely attack with this operation. Moreover, by glancing at the present practice of some of the English surgeons, it is remarkable to find that men of distinction, such as Syme, Coulson, &c., have arrived, by a somewhat different route, to the same results as Mr. Reybard. Their method, it is true, is more serious than his, since they add to the division of the urethral walls,

that also of the skin, adipose tissue, muscular layers, the bulb, and, in short, of all the thickness of the perineum. I do not wish here to institute a comparison between the urethrotomy of our countryman and that of Mr. Syme, for these operations are very dissimilar in a surgical point of view. I merely desired to direct attention to the idea by which they were both guided.

“In conclusion, both, experience and reason concur in placing the operation of Reybard among the conquests of modern surgery, and in reserving it as a precious resource in those cases of stricture which prove refractory under the methods of treatment hitherto known.” (Op. cit., p. xix. et seq.)

If more extended experience confirm the views of M. Reybard and of his learned Reporters, then indeed will a vast advance have been realized in the management of one of the most trying diseases we are called upon to treat. I trust, therefore, that I will be pardoned for the lengthy quotation I have thought it necessary to make in order to bring this new plan of treatment fairly before the profession. I can say nothing of it from my own observation, but would certainly not hesitate to give it a fair trial whenever a suitable case presents itself.

External Incisions.—Cases of strictures of the urethra are occasionally encountered, which resist the usual methods of treatment and in which it may become proper to resort to an incision of the urethra *through the skin*. This has been done as a dernier resort for a long time; but of late years Mr. Syme, of Edinburgh, has urged with much zeal the adoption of the procedure even in ordinary cases, or as a general plan of treatment. Like M. Reybard, with regard to internal incisions, Mr. Syme insists that external incisions is alike prompt, safe and effectual. The profession in Great Britain has been warmly engaged in discussing the merits of Mr. Syme's plan for several years, and may be considered as still very much divided in their views of the subject.

Mr. Syme describes his operation thus: “The patient should be brought to the edge of his bed, and have his limbs supported by two assistants, one of them standing on each side. A grooved director, slightly curved, and small enough to pass readily through the stricture, is next introduced, and confided to one of the assistants. The surgeon, sitting, or kneeling upon one knee, now makes an incision in the middle line of the perineum, or penis, wherever the stricture is seated. It should be about an inch or inch and a half in length, and extend through the integuments, together with the subjacent textures exterior to the urethra. The operator then taking the handle of the director in his left, and the knife, which should be a small straight bistoury, in his right hand, feels, with his fore-finger guarding the blade, for the director, and pushes the point into the groove behind, or on the bladder side of the stricture,—runs the knife forwards so as to divide the whole of the thickened texture at the contracted part of the canal, and withdraws the director. Finally, a No. 7 or 8 silver catheter is introduced into the bladder, and retained by a suitable arrangement of tapes, with a plug to prevent trouble from the discharge of urine. The process having been thus completed—which

it may be in less time than is required for reading its description—the patient has merely to remain quietly in bed for forty-eight hours, when the catheter should be withdrawn and all restraint removed.” (Stricture of the Urethra. By J. Syme, 1849, p. 41.)

With regard to the cases in which Mr. Syme advises this operation, I beg leave again to use his own language: “There are two forms of stricture in which mere dilatation has been found inadequate to afford relief. In one of these, the contracted canal is so extremely irritable, that the introduction of an instrument aggravates instead of alleviating the symptoms, and exposes the patient to various dangers from the local and general disturbance thus excited. In the other, the peculiarity consists in a contractile tendency so strong as quickly to counteract the effect of dilatation, and thus renders it useless.” (Edinburgh Monthly Journal, July, 1852, p. 33.)

From this quotation, as well as from the description of the operation itself, it is evident that Mr. Syme rejects the old maxim of making no external incisions unless the stricture be impermeable, and rather makes permeability a necessary condition for his operation. However much I am disposed to respect the old axiom just referred to, I think it would be unwise to make it a fixed rule of action, for there are undoubtedly many cases of permeable strictures in which dilatation affords only temporary and very imperfect relief, and in which even internal incisions will fail, unless perhaps made according to the principles of Reybard. I have present to my mind very vividly the history of a case I treated some ten years ago, which very fully illustrates the correctness of these remarks. It was that of a gentleman, about 40 years of age, whose urethra presented a series of strictures very near each other, and extending from half an inch from the meatus externus to the anterior junction of the penis and scrotum; indeed, the whole of this portion of the urethra was indurated and felt somewhat like a string of beads closely set. This case was the consequence of gonorrhœa, had been of several years' standing when I saw it, and had been treated by some of the best surgeons in our country. Dilatation, cauterization, and finally internal incisions, deep and repeated, had never given more than temporary relief, and the patient was obliged to keep up the daily use of a bougie in order to be able to urinate at all. The whole urinary apparatus had become involved, the bladder was very irritable, and the general health of the patient so much impaired that he was unable to attend to any business. An external incision comprehending the entire length of the induration not being deemed advisable, I proposed an opening to be made behind the scrotum, but as near it as possible, and to be kept open; thus simulating the course usually pursued by nature, in the establishment of a fistulous passage. The patient readily assented, and a free opening was made down to the groove of a director introduced into the canal; a catheter was then carried through this orifice into the bladder and retained a few days in order to avoid the danger of urinary infiltration. After this a bit of a large bougie, about two inches long, was kept in the opening to prevent its closure, and so secured that it could not penetrate too deeply. At first we used a

bit of gum-elastic bougie; but this would soon become deteriorated and unfit for use. We then tried a bit of leaden bougie; this did better, but was apt to slip out from its own weight. Finally, a small plug of white pine was adopted as the best material: whenever, however, its use was omitted a few days, the tendency of the fistula to close manifested itself, and the plug had to be replaced. By making a head to this plug, it could not pass in too deeply, and retentive means were dispensed with, the pressure of the scrotum being sufficient to prevent its escape. I had the satisfaction to see my patient rapidly regain his health and resume his occupations. I was enabled to watch this case several years, and he had no further trouble with his strictures, but still had to wear the plug. He finally died of some other disease. It is remarkable that the portion of the canal in front of the fistula seemed to have completely closed, for he could never after the operation pass any urine through it when attempting to do so with his finger upon the orifice made. The patient died at a distance, so that I had no opportunity to make a post-mortem examination.

I may be permitted here to relate another of those extreme cases in which the surgeon may be justified in resorting to unusual procedures. A negro man, about 50 years of age, had been many years afflicted with stricture to such a degree that he became unable to attend to any of his duties. The stricture was situated just in front of the scrotum; had been treated in the usual way by several physicians without success, and the patient could now pass his urine only by drops and with great effort. His general health was much impaired, and he was placed under my charge about fifteen years ago with the injunction not to undertake the treatment unless I thought I could make a radical cure. This was one of those cases which have given rise to so much discussion as to the value of the term *permeable*. It would be said by some to be impermeable because no instrument could pass through it; yet it was permeable to urine, for this fluid still made its way. I determined to make an external incision, to lay open the canal and then to introduce a catheter. But those alone who have attempted to open the urethra at a point closed by a thick fibrous texture, without the guide of a grooved director contained within it, can realize the difficulty of such an operation. In this instance, after laying open the induration, which was half an inch long, I sought in vain for the channel through which the urine had passed, and finally resolved to extirpate the whole of the indurated texture, to introduce a catheter into the bladder and to close the external wound by means of adhesive plaster. The wound healed by first intention, and the patient continued to keep the catheter in the bladder for a fortnight, after which he appeared to be perfectly well, but was advised to introduce a large bougie occasionally. The bladder had, however, become implicated, and he remained subject to attacks of cystitis, which in a few years became attended with very copious hemorrhages. It was not until then that the operation revealed one of its inconveniences; for the newly formed portion of the canal, not possessing any contractility, small coagula of blood

would lodge in it, and impede the flow of urine until removed by a bougie. The repeated lodgement of these coagula gradually distended this portion of the canal, and converted it into a small sac, after which it became very difficult to carry a bougie into the orifice of the natural urethra beyond it, for this being closed by its own contractility, the point of the bougie would be more apt to pass to the side of it than to penetrate it. Yet by simply breaking up the coagula, the urine would still readily flow. This man lived ten years after the operation, and finally died from the affection of the bladder, but never suffered any return of stricture.

But, to return to the consideration of Mr. Syme's operation, I must avow my decided objection to it as a rule of practice in the generality of cases. It is but fair, notwithstanding, that I furnish the results obtained by those who have resorted to this practice. The following statement is derived from Mr. Thompson's work. (p. 257.)

"The operation of dividing a permeable stricture upon a grooved sound as a means of cure has been performed, as far as I have been able to learn, about 115 or 120 times. Through the kindness of those gentlemen whose names are given below, from each of whom I have recently received communications either in person or by writing, I have obtained the histories of many cases hitherto unpublished, and have collected more or less of information, the results of which are annexed in general terms.

By Mr. Syme, above 70 times.		No death; a large proportion of the cases successful.
" Mr. Ferguson,	4	" One death; two tolerably successful; one doubtful. "Outlines of Cases," Nos. 1 to 4.
" Mr. Cock,	5	" One death; the remainder more or less successful. See "Outlines of Cases," Nos. 5, 6, 7, 8, 9.
" Mr. Coulson,	8	" One death; the remainder more or less successful. "Outlines of Cases," Nos. 10 to 17.
" Mr. Erichsen,	5	" The majority more or less successful. One or two doubtful. "Outlines of Cases," Nos. 18 to 21. "Reported Cases," No. 17.
" Mr. H. Walton,	1	" Successful. "Outlines of Cases," No. 22.
" Mr. H. Thompson,	1	" Successful. "Reported Cases," No. 11.
" Mr. Mackenzie,	7	" One death; the remainder more or less successful. "Outlines of Cases," Nos. 23 to 29.
" Mr. Dunsmure,	3	" Two more or less successful, one successful. "Outlines of Cases," Nos. 30 to 32.
" Dr. F. Thompson,	2	" Successful. "Outlines of Cases," Nos. 33, 34.
" Dr. Cruickshank,	1	" Successful. "Outlines of Cases," No. 35.
" Mr. Fiddes,	6	" Five successful, one doubtful. "Outlines of Cases," Nos. 36 to 41."

In the present state of our knowledge with regard to the procedures of both Messrs. Reybard and Thompson, I am disposed to regard them as valuable contributions to our means of treating strictures of the urethra, and to adopt them in such cases as may require them in consequence of having resisted other and simpler means. We are certainly not yet prepared to give them the preference over dilatation when this can be made successful.

In conclusion, I have only a word to say with reference to cases impermeable to instruments. In these, whether resulting from trau-

matic or other causes, we should first strive to render them permeable by the use of leeches, baths, opiates, &c., &c.; and if these means fail, we have no alternative left but external incision, however difficult this may be without guide.

I have already extended this paper beyond the limits of my original design, and still feel that I have not done justice to the subject assigned me by this society. An indisposition to tax your patience beyond endurance, must therefore plead my apology for the omissions that may be detected in this sketch of the treatment of an affection so fraught with interest to the profession and vexation to the patient.

EDITORIAL AND BOOK NOTICES.

THE HOMŒOPATHIC ACT AND ITS FATE.—In the March number of this Journal of last year, we announced the fact that the Legislature of the State of Michigan during the last moments of its then recent session passed an act recommendatory of the establishment of a “Chair of Homœopathy in the Medical Department of the University.” We contended that the act could only be considered *recommendatory*, as the Board of Regents were created a body corporate by the constitution of the State, were elected by the people, and entrusted by the organic law with the “General Supervision of the University, and the direction and control of all expenditures from the University interest fund.”

We further stated that from the utter absurdity of such an amalgamation as the act contemplated, and from our knowledge of the good sense and independent character of the men constituting the Board, we had no doubt that this hasty act of the Legislature (which from the circumstances of its passage could not be considered as an expression of the wishes of the people) would, after receiving a proper investigation as to its merits, be rejected as a basis of action by the Regents. This opinion was not based upon any specific statements of that body; neither was it put forth with the idea that anything, we might say, could influence their action, but it was expressed simply, because we believed it true, and because we knew, that, if such assurances were not given to the profession, their countenance and patronage would be withheld from the school, and with suspicion of unsoundness resting upon it, its halls would be deserted. Indeed,

the most strenuous exertions were necessary to correct false and mistaken statements, which were in some instances designedly, and in others inadvertently, yet in all, rapidly circulated; and by these corrections to secure the attendance of a class of students whom it would be an honor to instruct.

The friends of the Homœopathic act, finding that the Regents would not voluntarily act without reason, and knowing how little reason there was for compliance with their wishes, applied, as was announced in our February number, to the Supreme Court for a mandamus to compel the action of the Regents in accordance with the pretensions of the law. The Attorney General (who has not been remiss in looking after the shortcomings of corporations) did not deem it his duty to attempt to enforce this law, and if its friends had the courtesy to apply to him, they could not have received much encouragement from his opinion, since a homœopath, in his capacity of private citizen, commenced prosecution, with what results the decision of the Court, as given in another column, will show.

It is the custom of Courts, we believe, to go no further in their decisions than is necessary to dispose of the case in hand; and as there was sufficient ground for refusing the mandamus short of the constitutional objection to the law, that question was not reached by the Court, though from the opinion pronounced, if it were proper to infer the sentiments of judges on points not judicially decided, we should have no fears whatever concerning the decision which would be made upon the constitutional question, if it stood alone.

Thus has this bubble burst. Disapproved of by all connected with the University in each of its departments, regarded by the Regents as of no binding force, and condemned by them as an impracticability, avoided by the Attorney General, and having received the finishing blow from the Supreme Court, it has vanished into thin air, as impotent as the infinitesimals it was designed to bring into notice,—and should it again be conjured into existence, or brought in any other shape before the Court or the people, we doubt not its quietus will be made with still greater facility. It has now shown its proportions and disappeared, and, like other monstrosities, will not a second time attract the same attention.

A synopsis of the argument of one of the counsel in opposition to the granting of the mandamus, will be found in this number of the Journal, which, for its clearness and ability, we commend to our readers—and now take leave of this subject, hoping hereafter to find other themes more agreeable and instructive.

UNIVERSITY OF MICHIGAN vs. THE "BUFFALO MEDICAL JOURNAL."
—We regret exceedingly, that by a misapprehension on our part, of the success of the Homœopathic effort to procure an order from the Supreme Court requiring the Board of Regents to appoint a Professor of Homœopathy in the University, we should have given occasion for the shedding of so much sympathetic ink by the Editor of that spirited monthly, the *Buffalo Medical Journal*.

By a reference to the judgment of the court on the right of the party to move the issuing of a *mandamus* and the unanswerable argument of Mr. Campbell, the counsel for the University, on the constitutionality of the law, both to be seen on the preceding pages of the present number of our *Journal*, he will learn the true state of the case at the present time. As the fact on which his argument, big with the fate of the University, was founded, has been swept away by the action of the Judges, we think it fair to presume that he will carefully gather the fragments of his superstructure and re-construct out of them at some future time a new vindication of himself for the belligerent attitude he has assumed towards an institution of learning in a sister State.

When the *Peninsular Journal* was placed under the charge of the present conductors by the removal of its youthful and energetic originator from the State, it was distinctly intimated by them, that it should be more the exponent of professional opinion in the State than the organ of the school, to which one of our number is attached, more by a feeling of affection than by the force of the pecuniary bond which draws him to the institution. In the discharge of our duties as journalists, and in our character as representatives of the profession, we shall ever be mindful of the manner in which the administrators of the trust reposed by Congress for the endowment of an University in Michigan discharge their duty.

If the evils of nepotism or family influence, or political management creep into the University, to sap its vigor and destroy its vitality, we shall give due notice to all our neighbors, whose *interests* are so closely allied to the success or failure of the University of Michigan.

If it fail to fulfill its noble and elevating mission during our day, we will expunge from the record all we have ever written in favor of free education and crave the forgiveness of our vigilant and disinterested neighbors for ever having breathed one thought or written one word for the purpose of sustaining such an absurdity.

Of the egotism involved in the comparison of the value of instruction in free schools with that imparted by a faculty, whose knowledge

does not come of grace, but of purchase, we have nothing to say, as the sting of it is not felt by us collectively. And if it were, we should observe a becoming silence on a subject that cannot be approached without offending a correct and refined public taste.

BIBLIOGRAPHICAL.—The *Michigan Journal of Education* for March is before us, containing excellent original papers from its well known contributors: "Home and the Family," by H. D. Kitchell; "Union Schools," by E. O. Haven; "Study of Language, No. 3;" "The Teacher's Home," by E. W. C., besides well selected articles from exchanges.

The Annual Catalogue of the University of Michigan comes this year handsomely embellished with steel-plate engravings of the University grounds and buildings, and of the Detroit Observatory of the University of Michigan. It shows a total of 390 students in attendance the past year, as follows:

1st year, (Freshmen,) - - - - -	71
2d " (Sophomores,) - - - - -	59
3d " (Juniors,) - - - - -	30
4th " (Seniors,) - - - - -	21
Students of Partial Course - - - - -	42
	223
Students in Analytical and Applied Chemistry - - -	15
do. in Medical Department - - - - -	152
	390


✎ Since the notice given in our March number, we have received the first number of the *Medical Independent*, published in this city, as then noticed, by Elwood & Co. Drs. Goadby, Kane and Robinson, Editors. It contains 64 pages, 41 of which are devoted to original articles, the remainder to editorial and well selected pieces. Our space does not admit of giving the introductory editorial matter entire; we can make only the following quotation, and wish it a prosperous future: "Our title foreshadows our intention—to present a journal which is to be the organ not of a school or faction, but of the profession as a unit."

✎ It is with pleasure that we ask the attention of our readers to the advertisement of Messrs. HIGBY & STEARNS, to be found on the last page of our cover. This firm has just commenced the wholesale and dispensing *drug* business. Having been at a great expense in


fitting up their store, we can safely say it is one of the handsomest in the city. Mr. Stearns comes to us highly recommended from Buffalo as an educated and practical pharmacist. Mr. Higby has been for some time a partner in the firm of Higby & Dickinson, and is well known, both in the city and State.

We hope a prosperous future is awaiting them, and that they will receive the patronage due to enterprise and *ability*.

We cannot let this opportunity pass without saying a word for our friends T. R. SPENCE, HENRY SIMONEAU, and G. B. DICKINSON & Co., all of whom are so well known to the medical community, both in this city and elsewhere, as Druggists and Apothecaries, as to require no special commendation from us. They having been tried and found *worthy*. Please see their advertisements in our advertising sheet.

 We would state for the information of those who may come to Detroit as Delegates to the next meeting of the American Medical Association, that it will be held in the Firemen's Hall, corner of Jefferson Avenue and Randolph St. The Committee of Arrangements will be there to receive credentials, and give any information relative to the procurement of accommodations.

Strangers will not go amiss in stopping at either of our Hotels, of which the chief are the National Hotel, Biddle House, Michigan Exchange, and the Garrison House.

 It affords us no little satisfaction to see the indication of a large attendance here at the convention of the American Medical Association in May next. Preparations are being made far and near, as we observe not only from our exchanges, but have means of ascertaining from other sources. Our own State will be well represented here. The profession in this State is becoming actively interested in promoting its own general interest.

CORRECTIONS.

- In Feb. No., Art. IV., p. 361, line 3. for heterodite read heteroclite.
 " " " p. 362, line 21, for one read our.
 " " " p. 365, line 10 from last, for percoid read
 perenni-branchiate.
 " " " p. 365, line 9 from last, for epididymes read
 epididymis.
 " March No., for Batewell read Batwell.

 MISCELLANEOUS.

EMULSION OF PUMPKIN SEED AS A REMEDY FOR THE EXPULSION OF TÆNIA LATA.—In several of our more recent exchanges we find cases reported in which Pumpkin Seed Tea was effectually employed for the removal of this worm. The following is the formula used by Dr. Hunt, of Buffalo: Take of the seeds of pumpkin ℥ii, bruise in a mortar, and add enough of boiling water to make eight ounces; this is to be drunk at once, and in two hours after a full dose of castor oil.—*Med. Times.*

EXPULSION OF QUACK DOCTORS FROM CONSTANTINOPLE.—The Turkish Government has just taken stringent measures to expel from their service, and even from Constantinople, all the quack doctors that now swarm there. In this capital there are of one sort or another doctors enough to form a strong regiment. The measures proposed to be put in force by the Government, is that all doctors or surgeons shall exhibit their diplomas, and in case of their not being able to do so, to leave off practicing.—*Phil. Med. and Surg. Journ.*

HOMŒOPATHY, AND THE CHOLERA AT MARSEILLES.—Marseilles possesses, it would appear, a very considerable number of homœopathic physicians; to believe them, they would cure all their patients, and it was only in consequence of a kind of blind infatuation that their allopathic brethren refused to adopt their mode of treatment. The authorities, little satisfied with the result of ordinary medicine, wished to know the truth of the matter. They set the homœopaths to work, and the following letter, addressed by Dr. Bouquet to the *Gazette des Hopitaux*, proves once more how easy it is to be deceived as to the efficacy of remedies, until carefully instituted experiments interpose to distinguish the efforts of nature from the action of medicines:

“Homœopathy has just experienced a severe check in our town.

“You have perhaps heard of the noise it made last year with its pretended success in cholera. Dr. Charge asserted that he had not lost one out of several hundred patients, and he published this statement in the political journals of Lyons and Bordeaux.

“When, during the present year, the scourge visited us anew, the authorities bestirred themselves, and thinking it was their duty to bring the truth to light, they intrusted one of the wards of the Hotel Dieu to Dr. Charge. There, assisted by his colleagues in homœopathy, by pharmaciens, and by some young people, his adepts, who devoted themselves to tending the patients, (for he had found the ordinary staff insufficient and incompetent.) he obtained the result which might easily have been anticipated; the broad day-light did not display success.

“Of 26 cholera patients admitted into this ward, 21 died, and Mr. Charge withdrew.

“To render the experiment conclusive, a ward had been set apart, in which the patients were treated by rational means, which did not profess to work wonders.

“During the same period, of 25 patients but 11 died.


“Each ward had its turn of reception.


“I think that these facts are sufficiently decisive to render a renewal of such experiments needless, for if science profits by them, which is doubtful, humanity suffers not a little.”—*Journ. de Med. et de Chirurg. Prat.*, Oct. 1855.—*Med. and Surg. Reporter.*

LEGAL RESPONSIBILITY.—Judge Minot, of Pennsylvania, has laid down the following rules of law, as applicable to physicians. I. The medical man engages that he possesses a reasonable degree of skill, such as is ordinarily possessed by a profession generally. II. He engages to exercise that skill, with reasonable care and diligence. III. He engages to exercise his best judgment, *but is not responsible for a mistake of judgment.* Beyond this, the defendant is not responsible. The patient himself must be responsible for all else; if he desires the highest degree of skill and care, he must secure it himself. IV. It is a rule of law that a medical practitioner never insures the result. These are received in general as sound views, and such as will govern every enlightened court. There could scarcely be a greater absurdity, than to require physicians and surgeons to insure the result, when they can in no case control all parts of the treatment. Few serious cases are carried through a single day, and many not a single hour, without a violation of instructions, on the part of nurses and attendants.

THE THREE PHASES OF A SURGEON'S PROFESSIONAL LIFE.—M. Velpeau, who, besides being an eminent surgeon, is an excellent and extremely witty speaker, introduced the other day, in his speech on the Use of Setons, at the Academy of Medicine, the following sketch, which our readers will certainly thank us for translating: “In my professional career, there have been, as is the case with most medical men, three successive phases. The first, very short, during which, relying on the teaching of my masters, I readily accepted as the type of truth, and without much controlling scrutiny, what I had been taught. In the second period, that in which the ardour of youth had full scope, I examined more closely into facts, and began to try and strike into new paths, without much minding what I was upsetting in my progress. (At that time, I had strong doubts as to the efficacy of issues and setons, and it would be easy to quote passages from my writings against these therapeutical means.) At last came the third period, when a man begins to commune with himself, looks into the mass of facts which he has collected, and endeavours to test the value of what he has observed, without neglecting the teachings of those who for several centuries have gone before him. The result is, that I am now less averse to issues and setons than I was some years ago.”—*Med. News.*

PERFORATION OF THE INTESTINES WITH ESCAPE OF WORMS.—E. Reed, M. D., of Indiana, reports in the *Western Lancet* the case of a boy two years old, who had an intermittent which was broken up with Quinine, but difficulty still remaining which was attributed to worms, he was treated accordingly with worm seed oil and turpentine, followed by Calomel and Rhubarb, which freely moved the bowels, but brought no worms, Diarrhœa set in with swelling of the bowels. After two or three days, a tumor formed at the Umbilicus, which ruptured and discharged pus, and from which he extracted with the forceps two lumbricoid worms, one measuring 11 inches, the other 10½ inches, the last was followed by a small amount of feces. The child recovered, and passed no more worms by the bowels.

 Dr. Rivers reports in the *Southern Medical and Surgical Journal* a case of Peritonitis, terminating in inflammation and supuration in the testicle, arising from an enormous Scrotal Hernia. Reduction was accomplished on the 17th August, and the patient left comfortable; next day, the Doctor was summoned and found his patient with “Abdomen enormously distended, tongue fiery red, dry and cracked; pulse corded; countenance anxious to the most intense degree; testicles one hard, indurated mass, red and exceedingly hot; scarrified the scrotum and applied some fomentations and administered internally Camphor, gr. ¼. Hyd. Sub. Mur., gr. i. Pulv. Opii, gr. ¼, every hour, applied Blister 12 by 20 to abdomen. Patient gradually improved in all respects, except the testicle, which broke on the 28th, discharging a large quantity of pus.

 In the same Journal Dr. J. C. Billingslea reports a case of a bone lodged in the Rectum, simulating Dysentery. The Doctor was about to prescribe as if it were a case of Dysentery, but not being satisfied, as he complained of so much pain about the Anus, examined and discovered a flat triangular fish bone, engaged in the mucous membrane, which was dislodged with relief to all his symptoms.

OPIUM AN ANTIDOTE TO AN OVER-DOSE OF VALERIAN.—Dr. E. Darwin Abell communicates to the Boston *Medical and Surgical Journal* a case, in which opium was given with success to a patient who had taken a fourth of an ounce of extract of Valerian. The patient was raving and delirious, pulse frequent and tremulous, pupils very much dilated and inability to see, and with constant desire to micturate. After taking 1 gr. Morph., the pupils began to contract. He still continued delirious however, but having taken a second dose, he soon fell asleep, and awoke almost entirely free from any bad feeling, except languor.

M. ERNEST CLOQUET, physician since 1846 to the Shah of Persia, has lately perished, after excruciating sufferings, from taking by mistake a large dose of tincture of cantharides. He was married, not long since, to an Armenian lady.—*Med. News*.

PROF. OPOLZER AT WARSAW.—Prof. Opolzer has been sent for from Vienna to Warsaw, in order to treat Prince Paskiewitsch, who, notwithstanding he is an enemy to all doctors, was so taken with the Professor that he desired him to prolong his stay. Opolzer has diagnosed a perforating ulcer of the stomach, and the prognosis is rendered still worse by the fact of the existence of a large painful carbuncle in the spinal region. The Professor, it is said, receives 2,400 francs per diem, all the expenses of his journey, and residence being defrayed. Moreover, crowds of the inhabitants of Warsaw consult him.—*Ibid.*

STATISTICS OF MORTALITY IN PARIS IN 1854.—The number of deaths in Paris, in 1854, was 40,968, and 24,969 of them took place in private houses, 13,896 in hospitals. 1,582 in military ditto, 227 in prisons; 293 were registered at the Morgue, and 1 was an execution. Of the total, 20,348 were females, and 20,620 males. Notwithstanding the frequent recommendations of vaccination, not fewer than 802 of the deaths were caused by smallpox. As regards the latter disease, the mayors of Paris have published a notice recommending the poorer classes of the capital to get their children vaccinated, adding that “no man or woman can receive assistance of any kind unless they can show that their children have been vaccinated, and are sent regularly to school.”—*Ibid.*

ON A NEW AND EASY METHOD OF CLEANING THE SKIN AFTER THE REMOVAL OF PLASTERS, BY PROF. FORGET.—This method consists simply in placing upon the part contaminated with the plaster some very dry linen, and over this a napkin sufficiently warmed, applying it accurately and pressing upon it for a moment with the flat of the hand, then removing the linen just as the original plaster was removed. The matter of the plaster adhering more strongly to the linen than to the skin, leaves the latter perfectly clean after two or three repetitions of this manouvre.—*Rev. Med. Chir.*

OXALATE OF IRON.—Dr. Gamberini recommends the use of an oxalic ferruginous lemonade, prepared according to the following formula: Take of sulphate of iron half a scruple, oxalic acid 6 grains, distilled water 3 lbs., white sugar an ounce and a half—M. An oxalate of iron results, of a pale yellow color, and nearly insoluble in water. This quantity is given in divided doses during the apyrexia.—*Boston Med. and Surg. Journ.*

NEW TONIC.—A Yankee doctor has contrived to extract from sauses a powerful tonic, which, he says, contains the whole strength of the original *bark*; he calls it the “Sulphate of Canine!” He anticipates a great popularity for it in New York city.—*Worcester Transcript and Cin. Med. Obs.*

When the original *bark* or *canine* fails, we recommend our friend to try the *Dogwood* preparation *Cur-nin* (Cornin).

THE PENINSULAR
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ORIGINAL COMMUNICATIONS.

ARTICLE I.

Transactions of the Fourth Annual Meeting of the Michigan State Medical Society, held in Ann Arbor, Wednesday, March 26th, 1856.

The Society was called to order at two o'clock P. M., by the President, Dr. Pitcher.

The Secretaryship being vacant by the removal of Dr. Andrews from the state, on motion, Dr. Douglass was appointed Secretary *pro tempore*.

The minutes of the preceding meeting were then read and approved, after which the following address was delivered by the President:

On the Influence which Theoretical Opinions in Medicine have Exercised over Therapeutics.

I address my discourse at this time to a body of earnest truth seeking men, men who believe that their profession is not a trade, but a vocation, who feel that medicine was designed to fulfill an elevated mission on the earth, who trust in it, as an institution having the sanction of their creator, and whose zeal in its pursuit imbibes an ardor, and catches a hue from that inspiration which proclaims through other instrumentalities "peace on earth and good will towards men."

Springing into existence at the dawn of man's probation, when he gathered the first "fruits of that disobedience, whose mortal taste brought death into the world," when the seeds of decay were planted in our physical, as of depravity in our moral nature, involving in the one case spiritual death, and in the other, not only a limitation to physical existence, but a liability to have that existence abridged by disease, when the laws of its organism are infringed; it seemed at first, but an offspring of those instincts, best illustrated in the lower orders of creation, whose office it is to guide the individual to the adoption of those measures necessary for his preservation and the perpetuity of the species.

Thenceforward, under the direction of those faculties which exalt man in the scale of being, it assumed the form of a science, expanding under the influence of social culture and sacerdotal zeal, keeping pace with every advance in civilization and progress in art, till now, as a theme of study, it overshadows all others, and, as a pursuit, occupies no secondary place in the judgment of men capable of appreciating the relations they sustain, physically and physiologically, to surrounding nature as causes of mental and bodily abnormalities.

Whilst executing the task I have imposed upon myself, in the discharge of the duty enjoined by the constitution of the society that has placed me in this position, to-day, which is to endeavor to show to what extent therapeutic medicine has been regulated by speculative opinions, and to add some remarks designed to show how the dangers and difficulties in the way of medical progress may be avoided, I ask no audience from any detractor of medicine, whether he appear in the form of a philosophic doubter, like old Cato, or in the person of a worshipper of nature, like J. J. Rousseau, or the cynical and skeptical, because gouty and incurable Montaigne, or the more offensive, because more pretentious and sinning of a race of men of our own day, who, neglecting the weightier matters of the law, may be known without being named by their habit of preaching politics to men and practising homœopathy upon old women. My sympathy is with the firm believer in medicine—and my humble address is to the unflinching disciple of that school, who, not gasping for a divine afflatus consents to learn wisdom from pain-making experience, to draw knowledge as with a bucket, from the deep fountains of age, to study the charts of antiquity for the purpose of measuring his distance from the time-honored landmarks, and noting his position, so as to ascertain with accuracy the rate and direction of his own progress, in

order that he may not be found on soundings, from which the lead-line of his understanding can only bring up antique forms of thought or the discarded ideas of his professional ancestors, and in that way, whilst making advances himself, he may not confound the gems of antiquity with the productions of his mind, however brilliant or new.

I shall pass rapidly over the infancy of our race, when medicine could not have assumed the character of a science—when the traditions of the family constituted the sum total of medical knowledge, and the memory of the individual the bibliothéke of the household on this subject—when society was awaiting the action of those causes which broke into pieces the patriarchal state, out of which grew the earlier social changes that elevated a class in which were united the character and office of Priest and Physician. For during this early condition of society, a natural form of empiricism must have regulated the practice of medicine under a just belief, *that a remedy which had cured one person of a disease, would cure all others similarly affected.*

It is not our purpose to inquire through what phases the nations of men must have passed, before they became possessed of the means of embodying their knowledge on this or other subjects, so as to have left traces of their progress behind them on monuments or in books, as that involves the consideration of another subject, not essential to our purpose, and that is, whether letters are a human invention, or language the product of a human intellect, or the gift of our corporeal creator. On this subject, not even the science of a Champollion has cast the feeblest ray of light.

In the process of time, the heathen temples became the repositories of medical knowledge, as was the Aaronic Priesthood among the Jews.

So soon as this art escaped from the cradle of the race, and began to exhibit those attributes which indicate the growth of mental faculties, and a power to act independently of the instincts, and a disposition to bring them under subjection, men began to enquire into the structure of their own bodies, the nature and causes of the disease and the *modus operandi* of remedies. In this way, theories originated, by which therapeutics have been more or less governed through all the mutations the science has undergone from the time of the Asclepiadæ at the Isle of Cos, “who regarded disease as an association of phenomena, resulting from the efforts made by the conservative principle of life to effect a coction of the morbid matter in the economy,” till that era arrived when men were gravely taught,

that "it is only by means of the spiritual influence of a morbid agent, that our vital power can be diseased, and, in like manner, only by the spiritual (dynamic) operation of medicine, that health can be restored." (Hahnemann.)

The origin of medicine has been variously explained by different men. Their explanations according in many respects with their religious or philosophical belief. That class which takes the book of revelation for their guide, perceives in the nature of man the principle of decay, under which lies a susceptibility to disease, coeval in its origin with that moral change which made a vicarious sacrifice necessary, as the remedial means of restoring spiritual purity; and another class, of whom we may mention Plato among the Philosophers, assumes that the process of national degeneracy brought about by luxury and sloth, must have been passed through antecedent to the institution of inquiries after remedies for the correction of such morbid states, as would be induced by that degree of social progress. The period of incubation required for the production of the individual, to whom the functions performed by the physician were intrusted, terminated in different countries at different periods. In Greece, several hundred years elapsed before, these offices passed from domestic to sacerdotal hands. In Egypt, such a transmutation took place at an earlier day, as we may learn from the Bible, where it is stated that on the death of Jacob, Joseph commanded his servants, the physicians, to embalm him; and the physicians embalmed Israel.

Among the Jews, the Levites united in one person the duty of Priest and Physician. Although we learn that medicine was regarded with deference by that people, the most that is transmitted to us of their knowledge on that subject relates to Hygiene.

That internal monitor which prompts man to seek the means of allaying the sensation of thirst or hunger, would stimulate him when in pain, to adopt expedients for his own relief. In this way, no doubt, the first discoveries were made of the medicinal properties of plants, as some knowledge of medicine, according to the elder Pliny, has been found to exist in all nations, however, rude, before the origin of a class of men, especially occupied as physicians, made their appearance.

From this primitive condition, medicine passed into the temples, where it remained for several hundred years, constituting what has been called the mystical period, the priests of which are known under the name of Aesclepiadæ, a word which signifies descendants of Æsculapius. The success of the Caryphei depended as much upon

the Hygienic regulations prescribed for the observance of the sick, as to their therapeutics. Out of the records kept by the Asclepiadæ, it is supposed that the works ascribed to Hippocrates were formed. And according to the opinion of M. Renouard, it is to their clinical observations that we owe the first attempts at philosophic classification. The therapeutics of the whole of this period, that is the period anterior to the age of Pythagoras, must have been of that natural empirical school, which is thus qualified to distinguish it from a rational form of Empiricism that had its origin at the school of Alexandria.

As we approach the Christian era, we find the priesthood compelled to yield the scepter of science to the philosophers. Other changes came over the civilization of Europe, which tended favorably to advance the growth of this department of science. Absolutism had given place to republics or limited monarchies. "Public honors were bestowed upon merit and eminence in skill, or wisdom in council, the gymnasia were crowded with orators, physicians, philosophers and poets, assembled to hold their schools, and debate upon questions of art."

After these stages in the progress of science had been passed, when the materials for constructing a scientific edifice lay in a state of disorder, the inspiration of genius breathed over the scene, when one after another the disjointed fragments, under the influence of harmonious thought, began to take their position, and the column of art rose in majesty out of the chaos of preceding ages.

The first in the order of time, among those philosophers who instamped their opinions upon the minds of the age was Pythagoras, a native of Samos, an island of the Ægean Sea.

"He conceived the universe composed of three distinct worlds, bound closely to each other, each of which was developed in four distinct spheres. The ineffable Being, who, placed in the common centre of these twelve spheres, filling them all without being comprehended by them, was God.

The four spheres, from which are formed each one of its three distinct worlds, correspond to four elementary modifications of inert or amorphous matter. These primitive modifications are called fire, air, earth and water, and are the elements which constitute all material substances."

His doctrine of numbers was carried into the expressions employed in describing the nature and attributes of men, his organism and its functions. His opinions, being adopted by his medical

pupils, became the fundamental ideas of that sect which recognizes Hippocrates and Galen as their leaders, and known by the historical students of medicine as the Dogmatists.

According to this school, of which Galen is the most devoted sectator and recognized expositor, although sustained by such names as Plato, and Aristotle, and Hierophilus, and Praxagorus, there are three principles in man, spirits, humors and solids, also called parts. The most beautiful and exact proportions in which these principles are combined, constitutes the highest and most perfect degree of health. Such variations of these qualities as are not essentially incompatible with health, constitute the different temperaments. When these elementary constituents are so affected that one part becomes hotter, colder, dryer, or more moist than another, then the subject is diseased.

With a system of pathology based on such hypothesis, there must be associated a system of therapeutics made to conform to the hypothetical opinions entertained by the authors of such a system and imparted to their disciples. Out of this conformity there grew very naturally the ancient dogma of *contraria contrariis*, which became the unerring guide to treatment; and measures were accordingly adopted with a view to modify the temperature and the degree of moisture, as they have been found to deviate, in one direction or another, from a normal condition.

An historical writer in commenting upon this theory, notwithstanding its apparent simplicity, makes this remark: "Though he has written a great number of treatises on pathology and therapeutics, it would be difficult, if not impossible, to treat a single disease by his directions, so bad is the method he has adopted, and so defective was his manner of studying each case. I except, says he, from this prescription the last four books of the treatise on local affections, where he gives excellent counsel how to ascertain the anatomical seat of diseases, particularly of a mental and nervous character."

Medicine still treading in the footsteps of philosophy, gave origin to other sects, which together not only contended for empire with dogmatism, but in the end struggled to obtain a supremacy over each other. These are the Empirics and the Methodists.

The Empirics are an offspring of the Pyrrhonian doctrine of philosophical skepticism. The name assumed by this sect, which is literally an experimenter, has so far departed from its original signification in coming down to us, as to be now appropriately applied as a term of reproach to a set of men who reject the value of scientific

culture as the basis of an enlightened experimental philosophy, of which medicine is one of its branches; who contend that the essential lesions of disease are impenetrable to the human understanding, as is also the action of remedies employed for their removal—who reject all belief in a knowledge of the primary elements of disease, for which they substitute an enumeration of the sensible phenomena termed hypolyposis, wherein they resemble very closely a ready made set of practitioners of the present day who doubt every thing but their own infallibility. They gave no definition of fever, like the Asclepiadae, nor of health, like Galen, holding the belief that a man is in good health so long he is in the enjoyment of an unrestrained use of all faculties.

Their system of therapeutics was embodied in one axiom which is as follows: *Those remedies which have cured one case of disease, will cure all cases analogous to it.*

The writers of this sect, in their opposition to the Dogmatists, who, as we have already remarked, hold that *diseases are cured by contraries*, assert that certain diseases have been cured by similars and others by remedies which are neither contrary nor similar to the nature of disease.

The easy conditions on which men could become qualified for practice under the teachings of this sect, and the temptation to mental sloth inseparably connected with the inculcation of such a doctrine, co-operating with the action of causes hereafter to be mentioned, caused this system to decline, and by a process of absorption, to disappear among the materials of its rivals—such will probably become the fate of its modern analogue. When the study of medicine received a new impulse by the foundation of the Alexandrian school, the rival sects participated in the movement, and an active zeal was manifested in the efforts which each of them made to establish their power and extend their influence over the minds of their fellow men. Methodism, especially, felt the movement communicated by the spirit of the time. Its founder, Asclepiades, having become imbued with the philosophy of Epicurus, who taught that the elements of the body existed from all eternity; that they are incommunicable in their essence, indivisible, impalpable and perceptible to reason only; that these atoms are of various shapes and animated by perpetual motion, and from their combinations all the phenomena of the universe were supposed to result.

Applying his general physics to physiology, he taught that the tissues of the body are permeable being pierced with visible holes,

through which atoms of various sizes pass and repass. All the physiological functions are performed and the pathological phenomena occasioned by the spontaneous movements of the atoms and their spontaneous passage through the pores of the body. Health was supposed to depend on a symmetrical arrangement of these pores—and diseases, divisible into two classes, were ascribed either to an abnormal enlargement or constriction of them.

The therapeutics of the Methodists were divested of all complexity, as there could be only two indications to fulfill, which were, to relax when there was constriction, and to constrict when there was a flux or relaxation.

In this system there was no necessity for a scrutinizing research into the occasional or proximate causes of disease—when developed, the business of the practitioner was to apply the remedy, by following out the foregoing indications with such modifications as may have been rendered necessary by its duration and rate of progress.

These are the most important of the systems of medicine having a philosophical basis, which have been received by adoption among the physicians, and thus made instruments of good or evil, of healing or destruction, previous to the approach of that great intellectual eclipse which came over the world, known among men of letters as the dark ages.

These opposing systems, struck out by the collision of rival intellects, sustained by the energy of genius and the ardor of partisan attachment, when compared with the diversity of opinion which obtains among the moderns, and the obstinacy with which those opinions are advocated, go far towards confirming an eloquent remark of Mr. Littré.

“Antique science has a great resemblance to modern science. From the first memorials that we possess of it, the fundamental questions are debated, and the limits of the human mind are touched. But within these limits science finds an immensity of inexhaustible combinations, the materials for its growth.”

“This remark is as true of philosophy as of medicine. Plato and Aristotle indicate to us two sources whence flow all our natural knowledge; but do not both of them lead us into error by proclaiming in an exclusive manner, as a mode of acquisition, to one mental intention, to the other exterior observation?”

This incomplete description of the phases which medicine, under the guidance of philosophy, had assumed prior to the decay of learning, exhibits in a striking light that tendency in the human intellect when placed in possession of facts, to generalize, and even to theorize

in relation to isolated phenomena, when not explained by experimental research, which, when rightly instructed and disciplined, constitutes one of the essential attributes of the human understanding. Using philosophy as its instrument, the mind cast its medical theories in the mould of that sect, which for the time, pre-occupied the public opinion.

During the continuance of that period of obscurity, to which we have just attended, that letters and science and art were doomed to undergo, men, in forgetting philosophy, escaped from the thralldom of schools and sects, and began to exhibit a feeling of individuality, which rendered them impatient of the influence of leaders, whether in the church, the state or the schools. The fruit of that development of individualism has shown itself both in politics, religion and science. The problems worked out by it, have passed into history. Great results are still to flow from it, but whether it is to end in the crystallization, as a process essential to the preservation of the present elements of our civilization, or a disintegration of them and complete overthrow of the whole structure and substitution of a new, the future alone can disclose.

First, both in order of time and in reputation as a nosographer among those who attracted public notice after the revival of learning, we may mention, without awakening a feeling of personal or national jealousy, Boissier Sauvages. This classical writer made strenuous efforts to emancipate himself from the bondage of theoretical opinions as speculative dogmas. An ardent admirer of Sydenham, whom he calls the "glory of England and the pride of our art," he has nevertheless failed to follow the counsel of the English Hippocrates by writing the history of diseases without blending with his descriptions any theoretical explanations.

In direct contradiction to his own example, the Montpellier professor declares "that there has not existed up to the present time any connection between theory and practice; the latter is acquired by tradition, and no one has confidence enough in his theoretical principles to follow them blindly when the life of a man is at stake."—After having examined at length, in his Prolegomena, what should be the basis of a good nosology, he concludes by again quoting Sydenham, that it should be based upon the *constant and sensible characters of disease*. Departing from his own precepts he remarks on the subject of fevers: "The *cause* of fever is the distribution of the nervous fluid or forces, greater in the nerves of the heart than in the nerves of the members. This unequal distribution is made to destroy the obstacles which oppose the circulation of the blood in the capillary

vessels, to disembarrass the sanguineous vessels and re-open a passage for the blood. The heart and the arteries are the principle agents in fever." It is not a little singular that other nosologists as well as Sauvages, after having dwelt upon the futility of looking for the occult causes of disease, should have glided into that kind of research, some under one pretext and some under another. Being an earnest defender of the doctrine of animism, so far as regarded the agency of the intelligent principle in the prevention and cure of disease, his therapeutics partook of the character of his pathology, and his practical precepts approximated the inefficiency of Boerhaave, and Stahl, and Gaubius.

In Hoffman and Baglivi, who lived a little earlier than Sauvages, we perceive the remains of the ancient dogmatism in their doctrine of spasm and relaxation.

Cullen, less conspicuously, has incorporated the same idea into his doctrine of fevers. An excellent practitioner himself, he was less the slave of his own doctrines than many who adopted them; still, his opinions on the subject of excitement and collapse, when regarded as the initial point, from whence started the doctrines of Brown, his pupil and rival, may be charged with having given origin to more practical evil than can be traced to any other mind which has left the impress of its greatness upon the records of the profession.

Although thus remotely chargeable with the paternity of the doctrine of incitability, we cannot hold him responsible for the absurdities interwoven with it, as constituting the theory of Brown and of Broussais; nor for the extremes to which it led our own gifted countryman, Benjamin Rush. The very simplicity of the Brunonian system, built upon his fundamental idea "that life is only sustained by incitation," when enforced by the charm of eloquence and the power of genius, captivated the minds of great masses of men. Consisting of two genera, as the representatives of two opposite pathologic states, denominated the Sthenic and Asthenic diathesis, the one implying an excess and the other a want of incitability, the therapeutics of its author included but two classes of remedial agents which could be applied with the greatest facility, as the proportion of those requiring stimulants is as ninety-seven in the hundred, to three that do not. When we add to the seductive simplicity of the system, the fascination of the remedies, Opium and Alcohol, when their use has become habitual, and the facility with which the small amount of knowledge can be acquired necessary to put the system in motion, we need not

to be astonished at the popularity of its author, or at the magnitude of the evil which followed its adoption.

The influence of the doctrine of incitability was by no means confined to the place of its origin, nor has it been limited to the period in which it was first promulgated. Minds whose powers may not have been originally greater, but disciplined by a broader range of study, have yielded to its influence, and by it been carried to an opposite extreme in its practical application. This was the case to a certain extent with Dr. Rush. His opinions of the nature of fever and of the unity of febrile affections demonstrate this; but his method of treating it shows very conclusively, either that the atmospheric diathesis had changed even then, or that the rule for dividing the nosological scale of the Brunonians was very differently applied by Dr. Rush and Dr. Brown, the former of whom practised venesection almost to as great an excess, as the latter had given opium and brandy.

Another genius, Gallic in origin, striking for his originality, zealous and energetic in the defence of his own opinions, with an imagination naturally vivacious and warmed by a coal from the same altar which kindled a congenial flame in the bosom of Brown, in his work on the Chronic Phlegmasia, has been led by the idea of unity in the *fons et origo* of disease, to deduce therefrom practical rules, less fatal to morals, but scarcely less so to health and longevity than the precepts of his Scotian master.

Unless we admit the remark of Boissier Sauvages to be true, that practical medicine is learned by tradition, and not regulated by the theoretical principles which may have been simultaneously imbibed; I apprehend that enough has been said of the pernicious influence of systems to put us on our guard, lest we be led by them to the commission of fatal mistakes, without going into the construction of an argument to prove the imminence of that danger from the facts brought into view, against the adoption of theories in medicine, not verified by vigorous scientific tests and the results of post obit. examinations.

And yet we are of the number who believe that men always have and will continue to theorize on this subject as on all others, and even go so far as to assume as true, that theories are as essential to the practitioner as the compass to the mariner. If a man acts or refuses to act in view of a case before him, he does so, because he has arrived by the assistance of processes which have been going on in his own mind, at conclusions made in conformity to pre-conceived hypothesis.

How then are we to get rid of the evils of systems, whilst insisting that the tendency to frame them is instinctive, and that an analogous

act is performed whenever and as often as our faculties are put in requisition for the relief of human suffering resulting from disease. On this part of my subject it was my design to have bestowed more especial attention, but finding myself restricted in regard to time, I must briefly consider the question remaining to be discussed, and bring this address to a close.

Having seen what unsatisfactory results flowed from the teachings of philosophy, out of the bosom of which grew the three principal sects which divided the empire of mind for a long series of years, and cursorily remarked upon the extremes to which men have been carried by the strength of their own imaginations, since the revival of letters, we come directly to the question addressed to ourselves. If dogmatism, empiricism and methodism among the ancients have been failures, and if humoralism, solidism, vitalism, animism among the moderns have been unsatisfactory, and eclecticism a cheat, and homœopathy a delusion and lie, I see no remedy but in a return to a pure methodical and enlightened observation. By this, I mean a careful course of experimental therapeutics based upon a profound acquaintance with physio-pathology, implying an intimate knowledge of organology, of the changes going on in the solid structure and fluid contents, secreted and excreted products of the whole organism, as well as the chemical processes occurring in health and their modifications in disease; with the reciprocal influences of the mind and the body upon each other; with the essential signs by which these changes in structure and function are manifested; with the physiological effects of remedies, both primary and secondary; with the limitations of certain diseases, or their tendency to a spontaneous expiration; with the hygienic relations of man to his food, his raiment, his employments, and his social position; with the sensible qualities of the atmosphere, and with what is of no secondary importance—those various constitutions of the year which come neither from cold nor heat, drought nor humidity, but rather from a concealed and inexplicable alteration, which is known by the varying diathesis of diseases, that occur in cycles when the meteoric record gives no key to their diversity.

It will be seen that by the institution of these tests I hold "that every thing in medicine is related or should relate to therapeutics," and do not mean by observation the blindfold experiment of the Empiric who, acting upon his axiom *that every remedy which has cured one disease will cure all others of a similar nature*, pays no regard to the vital or chemical processes going on in the tissues or fluids of the body, nor to the physiological or chemical effect of the agent em-

ployed for the correction of those aberrations in external signs which are to him the essence of disease. It were better to go back at once to the position occupied by M. Bouillaud, who says "that therapeutics is necessarily but a deduction, a corrolary from the ideas which are formed on the nature of disease."

Neither would I class with observers, the sterile votaries of eclecticism, which from its nature precludes the idea of internal or organic growth, as from choice or self-imposed necessity, it only acquires magnitude by external accretions coming from such diverse sources, that there can be no common bond of union among its particles, nor principle or power of cohesion in the mass. And more, than all others, would exclude from the order of experimental observers, the expounders of that monstrous dogma, physiologically and pathologically the off-shoot of an absolute Empiricism, called Homœopathy, whose axiom is *similia similibus curantur*.

As the reason for excluding one rather than the other of these heterologous sects from the family of observers may not be equally apparent to all, I shall, I trust, be pardoned for occupying a few moments of your time in endeavoring to show the absolute impossibility of instituting with infinitesimal quantities such experiments as will lead to correct therapeutic results. In doing so, I shall also acquit myself of the imputation that might otherwise lie against me, of having written with a design to produce a mere rhetorical effect.

In order to a right understanding of the mysteries of Homœopathy, it must be kept in mind that the curative effects of remedies are ascertained by instituting a process called "provings," which consists in their administration to a person in health, in full, appreciable doses, in a natural (not dynamic or potential) state, and taking note of all the sensations that the individual may afterwards experience. By this means they acquire a knowledge of what is termed their "morbid powers."

When these have been ascertained, the remedy, after being potentized, or dynamically exalted, so as to have developed its spiritual power, whose morbid effects bear the greatest resemblance to the totality of the symptoms which characterize the disease to be treated, is selected for administration and given in doses of a millionth, billionth or the decillionth of a grain, according to the urgency of the case, the potency increasing with the magnitude of the dilution.

What is to be learned of the nature of disease and of the *modus agendi* of medicines, by pursuing this method of investigation? The effects produced by them being in the first place to be ascertained by

their action upon the healthy organism, when taken in sensible and ordinary doses, and their efficacy in disease by the administration of such doses as we have no possible way or means of ascertaining the weight of. By what method can we ascertain the dose of gold to calm the ferocity of a maniac, of which we are told by homoeopathy, that a quadrillionth of a grain is the appropriate one?

I will pursue this subject no further, but insist rather upon the pursuit of a nobler experience, founded on knowledge of structure, of function, of pathology, history and autopsic results, all of which to be sustained by an unbending integrity and a profound erudition.

The Society again proceeded to business, and the following gentlemen were proposed and elected members:

Dr. R. Inglis, of Detroit,	Dr. C. Winner,
Dr. E. Lauderdale, do.	Dr. A. Nash,
Dr. L. H. Cobb, do.	Dr. Sackrider,
Dr. E. D. Cone, of Hillsdale,	Dr. Comstock,
Dr. E. Wells, of Ann Arbor,	Dr. M. Gunn, of Detroit,
Dr. B. P. Wells, of Niles,	Dr. C. L. Ford, Ann Arbor,
Dr. De Mott, of Tecumseh,	Dr. Ewing, of Dexter,
Dr. A. F. Whelan, of Jonesville,	Dr. Dewson, of Windsor, C. W.,
Dr. Arnold, of Monroe,	Dr. Watson, of Detroit,
Dr. H. P. Cobb, of Detroit,	Dr. Case, do. do.
Dr. J. H. Baird,	Dr. Sivewright, Chatham, C. W.,
	Dr. C. P. Seeley.

On motion of Dr. Brodie, Dr. R. S. Rice, of Detroit, was elected an Honorary Member.

Dr. Taylor moved that a committee of five be appointed by the Chair to nominate officers for the ensuing year.

The following gentlemen were named by the Chair to constitute said Committee: Drs. Taylor, Paddock, Inglis, Palmer and Ashley.

Reports of Committees being next in order, and none being prepared, Dr. M. K. Taylor was by vote continued Chairman of Committee on Meteorology.

The Medical Faculty of the University was continued Committee on Prevailing Diseases, and Dr. E. P. Christian was continued Committee on New Remedies.

The Committee to nominate officers having returned, reported the following nominees, who were separately voted on, elected and installed:

For President, Dr. J. H. Beach, of Coldwater.
 For Vice-President, Dr. Shank, of Lansing.
 For Secretary, Dr. E. P. Christian, of Detroit.
 For Treasurer, Dr. S. H. Douglass, of Ann Arbor.

Drs. Beach and Shank upon taking their chairs, returned their thanks to the Society with brief and appropriate remarks.

Dr. Pitcher presented some documents which had been forwarded to him for the Society, being the Registration Reports of the State of Rhode Island for the years 1853 and 1854, which were on motion referred to Dr. Stebbins.

The following volunteer paper was then read by the President, Dr. Beach, and on motion referred to the Committee on Publication:

TO THE PRESIDENT OF THE MEDICAL FACULTY OF THE UNIVERSITY OF MICHIGAN.

Report of Observations of Diseases at Coldwater, Mich., in 1855.

In accordance with a resolution passed at the annual meeting of the Michigan State Medical Society in 1854, the following abstract of my personal observations is respectfully submitted. In my opinion, they are not disproportioned to the general facts which prevailed in Branch County: except that in the Township of Algoma, Dysentery prevailed epidemically, west of a small lake, affecting about one quarter of the population, and about six per cent. proving fatal. Have not been able to get reliable statistics or accounts.

May is apportioned from the most reliable information that could be obtained from other practitioners, having been absent myself.

The monthly proportion of acute diseases has been, as near as practical estimates can be made, as follows:

January	5,8	per cent.	of the year.	July	9,5	per cent.	of the year.
February	7	"	"	August	19	"	"
March	5,5	"	"	Septem.	14	"	"
April	4,1	"	"	October	15	"	"
May	4,8	"	"	Novem.	6,3	"	"
June	5,8	"	"	December	3,2	"	"

The following table will show with tolerable correctness the proportionate character of diseases, as observed by me during the several months.

The percentage omitted in the table would be filled with sub-acute or chronic diseases. I have chosen decimal ratio in preference to positive numbers, believing that more correct impressions would be conveyed. My practice is neither the largest nor smallest of ten or twelve competitors in my field of observations, but the several ratios are probably nearly alike.

Percentage of Several Diseases for each Month as observed at Coldwater, Mich.

	RATIO OF ACUTE DISEASES.		PRO-RATA OF DELIVERIES, Etc.	
	1855	1856	1855	1856
Jaundice			10	
Convulsions		6, 1,		
Gastritis	1,	10,	5,	
Stomatitis	10,	16,		
Furuncle.....	10,5,	5,		3,
Erysipelas.....	15,	5	3,5	2,
Varicella.....	5		10,	
Cholera Morbus		6,5	5,	
Diarrhoea	5,	4,	25, 30,	12,
Dysentery			13,	10,
Influenza.....	very common but light		2,4	2,
Laryngitis	5, 10, 10,	4,	Group 3, 5, 10,	Laryngitis 10,
Pleuritis	3,		4,	5,
Pneumonia	6, 10,	7,	1,5	1,
Metritis	5,	7,	4, 5,	6,
Hysteria	10,	5,	1,	
Rheumatism.....	31,5 30, 10,5 7,7	6,5	2,	
Urticaria.....		5,		
Neuralgia	5,	5, 15,		
Eczema Erythema Lichen	5,	7,		
Conjunctivitis	8,	1,		4,
Ague.....		5,5		
Int. and Rem't. Fever	5, 10,5 20, 8, 16,		26, 16,	40, 17, 30, 10,
Continued Fever	10,	No observations.	12, 13, 20, 20	16, 17, 30, 10,
Variloid	1 case	No observations.	1/2 billious	8, 16,
Typhoid Fever				10,
January				
February				
March				
April				
May				
June				
July				
August.....				
September				
October.....				
November				
December.....				

Month	PRO-RATA OF DELIVERIES, Etc.	
	1855	1856
January.....	5,5	4
February....	15,	
March.....	3,	
April.....	8,	
May		
June	4,	
July	9,	6
August	8,	
September..	4,	
October	12,	
November...	16,	
December ...	5,5	

Proportion of Males to Females as.....3, to 8,

Reports of Death in Coldwater, Mich., in 1855, from Cemetery Records.

	A G E S.														TOTAL.					
	Under 1 yr.		1 to 10 years.		Under 10 Sex not kn	10 to 15 years.		15 to 30 years.		30 to 40 years.		40 to 50 years.		50 to 60 years.		70 to 80 years.		80 to 90 years.		
	M	F	M	F		M	F	M	F	M	F	M	F	M		F	M	F	M	F
Accidents .....	...	1	...	...	1	...	...	2	1	1	2	1	...	2	...	...	...	...	...	6
Consumption	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
Convulsions	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Diarrhoea .....	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Delirium Tremens .....	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Dropsy .....	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	2
Dysentery	1	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	3
Emphysema	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Erysipelas .....	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2
Fever	1	...	2	...	...	...	1	...	1	...	1	...	1	...	...	...	...	...	...	7
" Typhoid .....	...	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	3
Gastritis .....	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Heart Disease .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Infl. of Brain .....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Phagedenic Ulcer .....	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Palsy .....	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Pneumonia .....	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	2
Rheumatism .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Strang. Hernia .....	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Not known .....	...	...	...	6	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	7
Total	2	4	4	4	7	1	3	4	4	3	4	8	1	2	2	2	2	1	1	56

NATIVITIES.—German 5. Irish 1. English 1. Not named in report 49.

NUMBER EACH MONTH.—January 2. February 3. April 6. May 2. June 2. July 1. August 10. September 7. October 12. November 9. No date 2.

DEDUCT OF ACCIDENTS.—June 1. July 1. November 2. Date of others not given.

The foregoing is a record of deaths rather than burials. The sexton who has charge of the principal burying places used by a population of about 3,500, having kept as full accounts as possible from his actual calls and other reliable sources, at my request.

I herewith submit a meteorological abstract, which scarcely gives an impression of the unusual dampness during the summer months.

Various fungi grew with unwonted luxuriance upon nearly every object, in unwarmed rooms especially in the wardrobes and libraries. Cacti and Aloe exotics gloried in the genial atmosphere, if protected from the frequent rains. The whole country suffered nearly alike from sickness, the usual limits to vicinity of streams, marshes, and newly opened forests having scarcely appeared.

The great amount of falling water kept the marshes cool, and the people supplied with water for culinary purposes of so good quality, that the pernicious influence of vapor was much abated. I am aware of the great imperfection of all these tables, but as they have been of some service to myself, I deem it my duty and privilege to offer them for your consideration. It has been a source of regret that they could not have been transmitted to the proper committee earlier, but uncontrollable circumstances have commanded otherwise.

Abstract of Meteorological Register Kept at Coldwater, Michigan, during the year 1855—Observations at 7 A. M., 1 P. M. and 10 P. M.

LATITUDE 41° 50' LONGITUDE 85° 30' ALTITUDE above Lake Erie 250 ft.

	MAXIMUM. Fht. Ther.	DATE.		MINIMUM.	DATE.		Greatest Rise in 24h.	DATES.	Greatest Fall in 24h.	DATES.	RANGE.	MEAN.	AVERAGE.	No. of Days Rain fell.	No. of Days Snow fell.	Completely	
																Cloudy.	Clear.
January	60°	2	3°	22	23°	1 P. M. 14—15	39°	1 P. M. 3—4	63°	28,50°	25,736°	8	13	5	0		
February....	54	21	14	24—28	24	8 A. M. 21—22	27	10 P. M. 22—23	68	20,00	18,580	2	12	2	2		
March.....	55	31	7	1	23	22—23	11	11—12	48	31,00	31,21	7	12	4	1		
April.....	88	18	17	2	24	10 P. M. 15—16	24	1 P. M. 5—6	71	52,75	52,71	10	1	0	1		
May	90	P. M. 1 29	30	A. M. 7 10	22	1 P. M. 13—14	18	1 P. M. 22—23	60	60	59,67	8	1	0	0		
June.....	92	" 29	39	12	18	14—15	20	15—16	53	65,05	60,98	19	Frost 1 Hail	0	0		
July	92	1—18	57	2—21	20	29—30	20	28—29	45	74,05	71,543	17	1	1	0		
August.....	92	" 3	49	18	15	7 A. M. 18—19	20	10 P. M. 16—17	43	70,05	69,436	9		0	2		
September..	87½	10	44	27	15	23—24	27	25—26	43,5	65,75	65,096	20		0	0		
October.....	76	9	22	25	30	28—29	32	29—30	54	49	47,726	11	4	1	1		
November..	69	5	19	29	25	4—5	29	15—16	50	44	41,626	12	5	2			
December...	61	1	1	1	14	30—31	25	22—23	60	30,05	26,17	5	13	2	0		

Abstract of Observations with Wet bulb Thermometer during August, September and October, in the Year 1855, Taken at 7 A. M., 1 P. M. and 10 P. M. in Shade, Etc.

	AVERAGE OF OBSERVATIONS.			MEAN AVERAGE.	
	7 A. M.	1 P. M.	10 P. M.		
August.....	62,03	75,09	63,33	66,816	Prevailing winds West, generally S. W. the whole year; sometimes from other directions part of a day or a few days.
September.....	59,28	68,17	58,13	55,160	
October	41,07	49,43	42,96	47,72	

J. H. BEECH.

It was moved by Dr. Ashley that the thanks of the Society be presented to Dr. Pitcher for his able and instructive address, and by Dr. Taylor that he be requested to furnish a copy for publication, which motions were carried.

On motion of Dr. Brodie the President appointed a committee of three, consisting of Drs. Brodie, Cone and Paddock, to select delegates from this Society to attend the next annual meeting of the American Medical Association; and the following gentlemen were constituted the Committee on Publication, viz. Drs. Palmer, Brodie and Batwell.

The Committee on Delegates reported the following names and their report was accepted:

Dr. M. A. Patterson, of Tecumseh,
Dr. E. D. Cone, of Hillsdale,
Dr. S. Denton, of Ann Arbor,
Dr. S. H. Douglass, do. do.
Dr. J. C. Gorton, of Detroit,
Dr. H. P. Cobb, do. do.,
Dr. Arnold, of Monroe,
Dr. G. B. Russell, of Detroit,
Dr. E. Wells, of Ann Arbor,
Dr. Tillson, of Romeo.

Dr. B. P. Wells moved that each delegate have power to appoint a substitute in case of inability to attend, by notifying the Secretary of the American Medical Association of the substitution, which was carried.

The following resolutions were then offered by Dr. Ashley and unanimously adopted:

Resolved, That this Society fully concur in the expediency of the recent change in the editorial arrangement of the *Peninsular Medical Journal*, and freely award our approbation of its position as our literary and professional representative.

Resolved, That the proceedings of this meeting be published in the *Peninsular Medical Journal*.

Resolved, That the surplus funds of this Society be appropriated to the *Peninsular Medical Journal* towards the expense of printing its transactions.

Dr. Brodie offered the following motion, which was carried, that the Secretary of the Society be instructed to furnish the Secretary of the American Medical Association with a list of its delegates to the meeting of that Society, and also to notify the delegates of their appointment.

Dr. Douglass on behalf of Prof. Brunow, extended an invitation to the Society to visit the Observatory at 7 o'clock P. M., and on motion of Dr. Pitcher, the thanks of the Society were presented to Professor Brunow for his invitation, and it was voted that the Society accept the invitation.

On motion of Dr. Taylor, a Board of Visitors, consisting of three, viz. Drs. Paddock, of Pontiac, Taylor, of Mount Clemens, and Wells, of Niles, was appointed by the President to attend the next examination of the Graduating Class.

Dr. Brodie presented specimens of *Veratrum Viride* and Extract of Liquorice from Tilden & Co., of New-York, and Mr. Stearns, Phar-

macien, of Detroit, presented many novelties in his line for inspection and examination; after which the Society adjourned to meet next year on the day preceding Commencement at 10 o'clock A. M.

E. P. CHRISTIAN, *Secretary*.

SPECIAL SESSION, MARCH 24TH, 1856.

In the absence of the Secretary, the organization was completed by electing A. Sager Secretary *pro tem*.

It was moved and carried that Dr. S. L. Andrews, of Romeo, be appointed Chairman of the Committee on Meteorology with privilege of appointing his associate, *vice* M. K. Taylor, who has removed from the State.

On motion,

Resolved, That the Secretary *pro tem*. be requested to solicit, in behalf of the Association of the Board of Regents, the publication of 3,000 copies of President Tappan's Address to the Medical Graduates of the University, for distribution.

On motion, Dr. E. S. White, of Tecumseh, was elected a member of the Association.

A. SAGER, *Secretary pro tem*.

ARTICLE II.

Translated from Archives Generale, December 1855.

Observations upon Hemorrhages from detachment of the Placenta inserted on the Cervix Uteri; Considerations on the Pathogenic and Therapeutics of that accident.

BY DR. LEGROUX, PHYSICIAN OF THE HOTEL DIEU.

[Continued from page 393.]

4th Case. Pregnancy again occurred a few months after this accouchment. The enlargement of the abdomen took place rapidly, and at the end of eight months, it was enormous.

At that period, a hemorrhage of several days, duration again took place. It was combatted by the employment of V. S. repose, and the internal as well as external use of astringents and refrigerants.

Several days before accouchment the flow returned, and continuing in augmented force during parturition, reduced the patient to a state of profound anæmia. The contractions, which were feeble were not at all increased by the use of ergot. The cervix uteri had not been dilated in the least degree.

The debility had now become so extreme that we dared not think of utilizing the erect posture. Cold applications and astringent injections having but partially arrested the hemorrhage, we resorted to the use of a tampon of charpie, saturated with a strong solution of alum.

The blood ceased to flow externally, and the subsequent extraction of the tampon proved that it had been completely arrested.

The presence of the tampon excited uterine contractions, and parturition was soon regularly established.

Having removed the tampon after the lapse of three hours, a decided dilatation of the cervix was ascertained, the os uteri being closed with a spongy and lobulated substance.

Passing my finger around within the orifice, I detected a fluctuating membranous surface, which, becoming tense with every pain, was easily ruptured with the finger. The waters flowed forth; the head folding back to the opposite side, the spongy placenta soon engaged in the dilating orifice, and, in a few moments, two fœtuses were expelled that bore marks of having been dead several days.

The secundines soon followed without accident or difficulty, but convalescence was retarded by an attack of metro-peritonitis, followed by a double crural phlebitis, from which an incomplete ankylosis of all the joints of the inferior articulations resulted, and which was finally cured by spending two seasons at the Bourbonne springs.

The menses have not since reappeared, but the presumed period of their recurrence is often marked by a sense of discomfort, by hypogastric pains, and paroxysms of hysteria, which yield to the influence of antispasmodics, aided at times by leeches applied to the vulva.—The general health is otherwise excellent, and even these accidents, with the lapse of time, recur with diminished frequency and intensity.

This entire case furnishes a demonstration of the proposition which I have advanced.

Of the source of the hemorrhage.—It is evident that the hemorrhage is purely uterine, when, the fœtus being dead, decomposition has commenced in the placenta, a condition which occurred in our first patient.

In admitting that after the death of the fœtus, the placenta remained adherent to the parietes of the uterus from which it received its nutrition by special vessels, it is evident that, the utero-fœtal communication having ceased, the vascular connection between the two organs was too limited to give rise to a renewed and considerable hemorrhage, such as those that preceded the death of the second patient.

In both cases the loss was nearly, or quite exclusively from the uterus. Is such also the case when the circulation between the foetus and the mother is yet undisturbed?

It might *a priori* be maintained, that, no change occurring in the course of the accident, the blood in every case is derived from the same source. This rational induction receives a practical confirmation from the case of Mme. Lemasson. In her case we saw the flow arrested by the vertical position which maintained the detached surfaces in contact, a surface of the placenta meanwhile of more than two inches in diameter, lying over the os uteri, being denuded.

If the hemorrhage issued from that organ, ought it not to have been greatly increased during the active contraction provoked by the position? We infer, then, that in every case the flow is almost exclusively uterine. The death of the foetus, which in a large majority of cases (7 or 8 of those I have seen) preceded the delivery, might be supposed to have been in the beginning placental and foetal. But as we have seen that there was no placental hemorrhage in the case of Mme. Lemasson, notwithstanding the conditions were most favorable to its production, and although the mother was greatly exhausted by the hemorrhage, the living child presented no signs of anæmia. The death of the foetus, in such cases, is due to the interruption of the utero-placental circulation rather than to a placento-foetal hemorrhage.

It might be objected to this theory that the complete separation and extraction of the placenta, as advised by Simpson, immediately arrested the hemorrhage. *Sublata causa, tollitur effectus.*

If this objection were well founded, the death of the placenta ought to have the same effect. This, however, is not the fact, since the hemorrhage continues to recur, as if the foetus were still living. We infer, therefore, that the source of the hemorrhage is not placental.—Whence, then, in these two cases, flows the difference in the results?

In the second, the dead placenta preserves a mechanical connection with the uterine parietes, and when this connection is destroyed, the vessels present open orifices, from which the blood flows until they retract within the wall of the uterus. The hemorrhage is, therefore, intermittent during the labor, although the foetus may have previously perished.

In the operation advised by Dr. Simpson, the entire placenta is separated at once, and the contractions of the uterus excited by the operation, immediately close the orifices of the ruptured vessels. Hence the hemostasis.

The inefficacy of this measure in a case of uterine inertia will be readily foreseen. The operation we conceive would in such a case be rather prejudicial than useful.

This theory of hemostasis is not without practical application, viz. To promote it, the labor must be increased. Such is the obvious consequence. The suspension of the hemorrhage has generally been attributed to the formation of an obstructive clot. In the autopsies I have made the clot was never met with. If that were the cause of the hemostasis, the therapeutic indication would be to preserve the clot, and for this purpose to moderate the uterine efforts, which would inevitably give rise to a fatal result.

From the preceding facts and discussions, we may regard it as established as a fundamental principle that the source of the hemorrhage, in cases of placenta previa, is almost exclusively uterine. We learn also from the case of Mme. Lemasson, the exhalation of blood takes place between the separated surfaces. But as the blood flows only from the uterine sinuses, we find in the rupture of those sinuses during the gradual dilatation of the cervix in the latter months of gestation, its more rapid expansion during parturition and the subsequent retraction of the lacerated vessels, in this mechanism we find an explanation of the successive appearance and arrest of the hemorrhage.

Is the hemorrhage arterial or venous? The observations of Dr. Wm. Mackensie upon the parturition of the bitch, leads also to the same conclusion, that, where a partial separation of the placenta occurs, the hemorrhage arises from the denuded uterine surface and never from the surface of the placenta. From the same series of observations, as well as from injections of the uterine vessels with defibrinated blood, the same observer was led to the conclusion that the blood flows from the ruptured arteries. Considering the vast development of the uterine veins during gestation and the very free communication existing between them, in common with M. Jacquemier, I cannot readily subscribe to that conclusion. I will add furthermore, that, if that were the source of the hemorrhage in such cases, it would be almost inevitably and speedily fatal.

The question of order of vessels from which the blood flows, is, however, more nearly related to theoretical than to practical considerations. In the latter relation it is more important to determine the organ from which the hemorrhage comes, than the order of vessels that immediately furnishes it.

Of the relation of Coincidence between the Uterine Systole and Diastole and the Hemorrhage. I will here recall the observa-

tion previously made, that the hemorrhage often occurs long before the conclusion of the term of gestation, is repeated before the beginning of labor; that it is often intermittent during parturition, and is consequently *independent of the contractions of the uterus*.

It is stated that in cases of placenta previa, the hemorrhage during labor occurs simultaneously with the uterine systole, and that it is arrested in the intervals; the reverse taking place when the placenta, attached to any other part of the uterine surface, becomes partially separated.

The statement is perfectly correct in reference to the first case, but the interpretation of it is erroneous.

It is proved that the placental circulation is at most but an accessory source of the hemorrhage, and that its influence is moreover nullified by the death of the foetus, which frequently occurs after excessive hemorrhages. Common sense teaches the impossibility of flow of blood from the separated portion of placenta, when by the contractions of the uterus the foetal membranes are strongly applied to the uterine parietes. Experience also confirms this view, for, as we have seen in the case of Madame Lemasson, the hemorrhage ceases as soon as pressure upon the cervix uteri occurred by the weight of the ovum in consequence of the assumption of the vertical position, and the tonic uterine contractions prevented a separation during the diastole.

The fact is, however, generally observed, that in the horizontal position, the flow ceases during the repose, and recurs during the contractions of the uterus; but the interpretation of the fact has been defective; the important fact having been overlooked that the apparent hemorrhage, which took place during the contractions, was but an elimination from the vagina of the product of the real hemorrhage, which occurred in the preceding period of repose.

This fact was placed beyond doubt by the parturition of Madame Lemasson.

In reference to the attachment of the placenta to other portions of internal surface of the uterus while the phenomena of the accident have been imperfectly observed, a correct interpretation of them has been given; the hemorrhage is here with reason admitted to occur during the uterine quiescence, and to cease when contraction takes place. It is manifest, that if the blood is expelled, this can not occur during the repose of the uterus; it is not less evident that the blood accumulated between the separated surfaces and in the vagina, must be detruded when the organ contracts. It is evident, then, that

the facts have not been correctly observed; yet the effect of uterine contraction in the arrest and prevention of sanguineous exhalation has been distinctly recognized.

The views then generally received, relative to the periods of the hemorrhage, as connected with the place of attachment of the placenta, is erroneous; coming as it does from the internal uterine surface, the true flow occurs in the same relation, whatever may be the point of placental attachment.

The conclusions we deduce from these observations, are:

1. Whatever be the point of insertion of the placenta, all hemorrhage due to the separation of that organ takes place only during the diastole or repose of the uterus.
2. The contraction of the uterus always suspends it.
3. The blood which flows during the systole had accumulated between the detached surfaces, and in the vagina during the diastole of the organ.
4. The hemorrhage would be arrested if the contraction were permanent, or if the separation of the detached portion of the placenta could be prevented during the uterine diastole.
5. The hemorrhage is almost exclusively uterine; the proportion that proceeds from the placenta, although, perhaps, sufficient to jeopardise the life of the child, could have but slight effect on that of the mother; and when by the death of the foetus the placenta is rendered impermeable, the limitation to the uterine surface is perfect.

On the Effect of Vertical Position in Parturition in general, and especially in Hemorrhage from Separation of the Placenta.—The horizontal position, with some degree of elevation of the shoulders, is that usually adopted in France during the progress of labor.

In the altitude, the uterus is carried by the contraction towards the vulva, the os uteri being closed during the same effort by the tense membranes, or one extremity of the foetal ovoid.

In the interval of the pains, the uterus ascends in the pelvis, and the os uteri is less firmly closed by the retraction of the foetus and the diminished tension of the membranes.

The foetus rests on the posterior wall of the uterus; a part of the contraction is expended in raising and carrying it towards the orifice and in depressing the uterus in the pelvis; the expulsive agency of the contraction is therefore somewhat diminished.

In a natural and vigorous labor, this loss of force is not appreciable in the progress of the labor, but in cases of feeble uterine action, the pains barely suffice to move the fœtus towards the orifice. The labor is retarded, and may even remain stationary for hours and days, without the intervention of art.

Valuable service in such cases may be rendered by ergot; but it may be found insufficient, and resource must ultimately be had to the use of the forceps.

In cases of this character, the vertical position alone, or aided by a few small doses of ergot, will render the uterine efforts sufficient to complete the labor unaided by art.

In that position, the liquor amnii and the fœtus are brought by their gravity alone to act as a persistent dilating force upon the os and cervix uteri.

Relieved from the weight of the fœtus, the uterus, however feeble may be its contractions, acts now exclusively in the expulsion of the fœtus. All the physical conditions conducive to delivery being here present, even with moderate contractions the parturition is generally promptly and successfully completed. But one of the effects of that position is the augmented energy and greater frequency of the pains, by which a labor that may have lingered several days, is often speedily completed. When, however, a considerable degree of exhaustion occurs, the horizontal position should be alternated with the vertical in order to restore, by repose, the wasted energies of the system.

We may avoid the necessity, in a great majority of cases, of the use of the forceps, by adopting this method, and prevent the accidents too often resulting from their use when unskillfully employed.

The hemostatic influence of that position when the placenta is partially detached, may be readily understood. Pressing from above downward, it operates efficiently as a natural tampon in preventing the separation of the disunited portions of the uterus and placenta in the periods of uterine repose; to which we may add that the augmented energy imparted to the pains considerably enhances its efficacy.

We may admit, however, that position alone will not in all cases suffice to arrest the hemorrhage; besides, cases of extreme exhaustion decidedly contra-indicate the employment of this method. What must then be done? Under such circumstances the first and most important of our resources is the tampon, when skillfully and methodically employed.

I have before me at this moment an extract from the *Journal of*

Medicine and Practical Surgery, containing the opinions of Prof. P. Dubois upon this subject. I can not do better than to repeat them.

According to that eminent professor, the tampon possesses the double advantage of at once arresting the hemorrhage, and of accelerating the labor. Recourse to this very salutary measure is often too long delayed. The second parturition of Mme. Lemasson furnishes proof of the truth of these statements.

In such cases it is proper to employ this measure as soon as the diagnosis has been assured, in order to avoid the exhaustion inevitably consequent on repeated and prolonged hemorrhages. For this purpose it may be indicated under two different circumstances: either the labor may have commenced, or the uterus may yet be inert. In the first case, by stimulating the uterus to more vigorous contractions, the tampon hastens delivery, while at the same time it mechanically arrests the hemorrhages, thus accomplishing its object by a two-fold mode of action. In the second case, if pregnancy be nearly completed, the tampon may originate action, and thus effect a premature delivery; a result, fortunate to mother and child.

If the female is already debilitated by repeated attacks of flooding in the latter months of gestation, should not this preventive measure at once be employed? I can discover no rational objections to this procedure.

Whenever the indication may occur, a female predisposed to this grave accident, should be provided with a bladder pessary of vulcanized caoutchouc, and practice its application in order to be prepared at the first manifestation of the hemorrhage. In the absence of this instrument, the obstetrician should not hesitate to resort to this measure whenever an alarming hemorrhage occurs.

It may not be useless here to state the precautions indicated by Prof. Dubois, for the success of this operation.

The tampon may be composed of pellets of linen, of charpie, or of agaric, &c., and furnished with strings to facilitate extraction. The coagula having been removed from the vagina, a speculum may be introduced to facilitate the passage of the first pellets to the cervix uteri and the cul-de-sac that surrounds it. Especial care must be had to fill every part of the vagina perfectly with the pellets; the whole must be sustained by a T. bandage. If the labor has not yet commenced, the tampon may be permitted to remain twenty-four or thirty-six hours before renewal, and continued until the dilatation will permit the perforation of the membranes. It will rarely be necessary to renew it more than twice, before sufficient dilatation occurs.

The vertical position is in some measure the complement of the tampon; in effect, the placenta is thus placed between an upward and downward pressure which effectually prevents its separation. To supply the place of the pressure from position, it may be necessary to apply a bandage around the abdomen.

If I am not mistaken, serious inconvenience may arise from introducing pellets into the os and cervix, as by elevating the placenta, it keeps it partially separated from the uterus.

Is it necessary to saturate the tampon with an astringent liquid? Although medical opinion is somewhat divided upon this point, most writers incline to the opinion that no important advantage can be derived from those solutions. If the hemostasis is consequent upon the reintegration of the vascular orifices into the uterine tissues, it may perhaps not be without interest to saturate the first tampon with some astringent to induce contraction of the uterine fibres.

The vulcanized caoutchouc bladder-pessary offers a mode of tamponing at once simple and easy of application, and its efficacy has been acknowledged by the best practitioners, among others by M. Honore Chailly.

I stated at the beginning of this chapter that the tampon should be employed from the commencement of the hemorrhage; I will add also, before the rupture of the membranes, which, as a remedial measure, I propose next to consider.

Of the Perforation of the Membranes.—The object of this operation is, by an evacuation of the liquor amnii, to secure a firmer retraction of the uterine parieties, and as a consequence, the re-integration in the tissue of the organ of the vascular orifices denuded by the detachment of the placenta. This measure is adopted now by nearly all masters of the obstetric art in most cases of copious hemorrhage supervening near the close of gestation. Before resorting to it, however, it is generally preferred that the labor, as evinced by the occurrence of regular pains, should have been fairly commenced.

The author of an excellent treatise on obstetrics, M. Cazeau, is of the opinion that in such cases this measure ought to be preferred to the application of the tampon.

M. Prof. P. Dubois is so thoroughly convinced of the value of the perforation of the membranes as to make it a fixed precept that it should be substituted in such cases for forced parturition by version; requiring, however, *that the contractions should be regular and strong, that the os uteri be somewhat dilated, and also a good presentation of the foetus.*

This is certainly more than a mere commencement of labor, it is virtually the artificial rupture of the membranes, near the close of the first stage. Both writers, however, remark that after a copious hemorrhage the pains are generally weak, and that the labor may be well established while as yet the pains may have scarcely indicated its commencement. It may also happen that the pains shall be suspended after having been regular and strong; the neck and os being dilated and soft.

In both these cases the state of the os and cervix must determine the conduct of the practitioner. The best method to awake the suspended contractions, is to perforate the membranes. But should this operation be had recourse to when the dilatation is so slight as barely to permit the introduction of the point of the finger, and when also the occasional tension of the membranes indicates the beginning of labor? M. Cazeau deems the practice in such cases highly advantageous. But to my mind, notwithstanding the authority of that distinguished accoucheur, the advantages seem more than counterbalanced by the inconveniences of this early perforation.

In the first place, it is not quite certain that it will prove hemostatic. But even admitting the certainty of the effect, it must soon happen, if the delivery is not promptly terminated, that the contractions of the uterus will cause the separation of other portions of the placenta, and the hemorrhage will be renewed. The premature evacuation of the liquor amnii moreover retards the labor, and of course augments the chances of hemorrhage, and instead of being conducive to the safety of the infant, it may even become fatal to it by subjecting it to the immediate action of the uterus.

While we possess in the tampon, especially the bladder-pessary, a resource of nearly equal efficiency as a hemostatic, is it not better to wait until the cervix becomes dilated and supple, in order that the delivery may promptly follow the evacuation of the amniotic fluid? Besides, is there no danger in premature rupture of the membranes? If the hemorrhage persists or is renewed after the operation, can we have recourse to the tampon with equal confidence, and may we not apprehend that, being prevented from flowing outward, it will accumulate in the uterus itself?

When a partial placental presentation occurs, during the progress of the labor, a portion of the membranes will be projected through the os uteri; through this portion a puncture should be made when sufficiently advanced. But when a central presentation occurs, should the perforation be made directly through the placenta? In two cases

of this character M. Gendrin has known the hemorrhage to cease on perforation of the placenta with a female sound directed through the os uteri with the finger. Notwithstanding the successful issue of these cases, I still retain an unfavorable impression of the premature evacuation of the liquor amnii.

On the other hand, the perforation may give rise to serious difficulties in the progress of the labor. If, by the force of the pains, the placenta should become lacerated at the point of perforation after the passage of the head, the progress of the labor would be obstructed by the dragging of the shoulders upon the placenta. Let us add that the complete detachment of the placenta would be necessarily fatal to the infant unless the accouchement be speedily terminated.

It appears therefore more rational in such cases to wait until sufficient dilatation has taken place, then introducing the finger along the internal surface of the cervix, perforate the membranes as near the border of the placenta as possible. If at the moment of rupture the pains are vigorous, the gush of waters will so far lacerate the membranes and raise the border of the placenta as to permit the engagement of the head, which will then fold the placenta upon itself laterally.

The idea of an early rupture of the membranes has been attributed to Puzos; but it should be observed that he had previously dilated the cervix gradually by the introduction of the fingers, and in so doing excited active uterine efforts which are in themselves hemostatic; and under these conditions the rupture of the membranes would be less unfavorable, or, if you please, more advantageous.

It is generally stated that the uterine contractions, which follow the rupture of the membranes, will press the fœtus so firmly against the hemorrhage surface, as to arrest the flooding.

But it is not quite certain that forcible contractions will occur after the loss of the waters; neither is it certain that the presentation is such as to favor the operation of the fœtus in the mode assumed. Do we not, in evacuating the liquor amnii, lose the influence of the superior tampon or bladder-pessary, at the moment when it is most serviceable?

Before evacuating the membranous sac, is it not rational to delay, until in the progress of the labor the fœtus becomes so compacted, as to enable it to fulfill the office of a tampon efficiently by pressure on the separated portion of the placenta. To this end, the vertical position contributes in cases of placental attachment to the neck of the uterus.

To sum up then, the measures to be employed in hemorrhage at the close of gestation, arising from detachment of a partial or complete insertion of the placenta over the os uteri, are these following, viz:

1. The tampon and, by preference, the bladder-pessary, as it permits us to watch, the progress of the accident as well as that of the labor, without fatigue to the patient.
2. Keep the patient in an erect attitude, employing assistance for that purpose, if it be necessary. This completes the plugging, and it is alone sufficient when the contractions are vigorous.
3. If it be required, augment the activity of the labor by the use of ergot.
4. Perforate the membranes *when the pains are strong and regular, when there is a certain degree of suppleness and dilatation of the os uteri, and when the presentation is also normal.*
5. The insufficiency of the tampon and the vertical position would authorize us to resort to a somewhat premature rupture of the membranes, in order to ensure at least a temporary suspension of the hemorrhage.

Finally, if the hemorrhage persists or frequently recurs, as seriously to menace the life of the female, notwithstanding the use of the above measures, we should have recourse to extraction of the placenta.

Of the Extraction of the Placenta.—The complete separation and extraction of the placenta, extolled by Prof. Simpson, is generally followed by a complete cessation of the hemorrhage.

The indication of this measure is derived from the insufficiency of other means previously employed. It must be regarded as an ultimate resort, and cannot with propriety be had recourse to, *except when the fœtus is either dead or non-viable, or the labor cannot be completed by version or the use of the forceps.* (M. P. Dubois.)

I cannot do better than to present a summary of a case, in which this operation was performed, by Prof. P. Dubois, at the lying in hospital.

A female, at the close of the period of gestation, was attacked with hemorrhage, which was attributed to the insertion of the placenta on the inferior segment of the uterus.

Unsuccessful attempts were made to pierce through the placenta; not even by a laceration of the substance of the placenta could the amniotic sac be reached by the finger. The tampon was also employed, but equally without success. The patient was brought to the lying-in Hospital. The membranes were perforated, the walls of the

uterus were imperfectly retracted, the hemorrhage, although diminished, still continued sufficient to jeopardise the life of the mother, notwithstanding the simultaneous use of ergot.

When Prof. P. Dubois visited the patient, the vagina was found full of blood, the os uteri dilated to the size of a five-franc piece, the placenta implanted over the orifice; the sounds of the foetal heart were inaudible.

In this state of things, the dilatation rendering delivery by version or the forceps impracticable, Prof. Dubois deemed it expedient to effect an entire separation and extraction of the placenta; by introducing his fingers into the uterus, he seized the placenta by its border, then completely separating, he twisted and extracted it. Half an hour afterwards, strong contractions were excited by ergot, previously given, by which the foetus was expelled four or five hours after the extraction of the placenta. The foetus had evidently been dead some hours.

This case proves what was before stated, that hemostatis is not certainly effected by the rupture of the membranes.

It is not an improbable supposition, that hemorrhage might persist from uterine inertia, after the extraction of the placenta as after complete delivery.

As before stated, hemostasis, after extraction of the placenta, does not invalidate the opinion previously expressed, respecting the source of the hemorrhage; that opinion is corroborated by the fact of the suspension of hemorrhage after the central perforation of the placenta. In the case already related, we have seen the flooding diminish after the rupture of the membranes. It is not improbable, that the subsequent hemorrhage took place from the placenta, in consequence of the partial detachment of it, together with the perforation of the organ with loss of substance; but it must be observed that there were no uterine contractions, and that the lacerated vessels had not completely retracted; moreover, the probable death of the foetus had greatly modified the placental circulation. The action of the ergot, which we may suppose, was beginning to be felt, together with the manipulation necessary to extract the placenta, by inducing uterine contractions, would sufficiently account for the cessation of the hemorrhage immediately after the operation.

Of Artificial Delivery and Forced Labor.—If the measures which we have already noticed, be found inadequate to the suppression of the hemorrhage, rather than permit the life of the mother to flow out with the blood, we should endeavor to save her even by the hazard-

ous operation of a forced delivery, aided perhaps even by incisions into the os uteri. The indication for such an operation would, of course, be extremely rare.


Does a full dilatation of the cervix, with suppleness and tenuity of the part, combined with inertia uteri, furnish a sufficient indication for immediate delivery by version or with the forceps? Perhaps I am mistaken; but in such a case, I should be disposed to wait for spontaneous delivery, if the hemorrhage could be controlled, and especially if, the membranes being intact, I could calculate upon the amniotic bag, acting as a superior tampon, to complete the action of the vaginal tampon. But I repeat here, right or wrong, I dread the perturbation induced by obstetrical operations; they should be resorted to with extreme reluctance.

If the debilitated condition of the female forbid a recourse to that operation, we should, after checking the hemorrhage by a tampon, place the patient in a horizontal position, with the head low, and the hips and limbs elevated by pillows, to facilitate the return of blood to the heart; the abdomen should also be compressed by a bandage, to prevent accumulation of blood in the large vessels, and press the uterus into the pelvis. Hot wine and broth will also be necessary to sustain the vital powers; the nervous system may be stimulated with flying sinapisms, frictions, and even superficial cauterizations may be employed to excite the heart's action, if the syncope becomes alarming.

If by these measures we succeed in restoring some good degree of animation, a reasonable expectation of returning action of the uterus may be entertained, and a few doses of ergot may be given, if necessary, to provoke or to increase expulsive efforts.

I will conclude with some ethnological considerations. All the cases of placenta previa, of which I have known the antecedents, have occurred in multiparous females, in whom the cavity of the uterus would necessarily have greater amplitude than in primiparous, a condition favorable to the facile descent of the fecundated ovule to the inferior segment of the uterus. Little could be effected by way of prophylaxis in such cases; however, if a predisposition was believed to exist to this abnormal attachment, the female should be induced to spend the earlier months of the next gestation in a horizontal position.

A. S.

 Chloroform, by inhalation, to the extent of thirty or forty drops, repeated several times a day, is commended in the foreign journals in Pneumonia.

ARTICLE III.

Singular Abnormity of the Arterial System.—Constriction and Obliteration of the Aorta, &c., &c.

For the Peninsular Journal.

MESSRS. EDITORS:—Thinking that the description of a rather rare pathological specimen which I examined in the dissecting room of the University this winter, would not be uninteresting, I have taken the liberty of giving you the results of my observations.

The aorta was obliterated immediately below the arch at the commencement of the descending portion. The vessel rose from the heart of the normal size, and, at the point mentioned, became suddenly constricted, as if the obliteration had been caused by a ligature. The cord resulting from the diminution was about the size of a crow-quill and of about 3 inches in length, when it regained the normal calibre as suddenly as it had lost it. The right subclavian was so much enlarged, as to rival in size the aorta and resemble a second "arch."—The superior intercostal branches of this artery were very much enlarged and inosculated very freely with two large vessels given off by the aorta below the constriction. These vessels arose from the thoracic aorta, in the same position as the fifth and sixth intercostal arteries; but, instead of passing forward between the ribs, they ran rather obliquely upwards, crossing the vertebræ and the heads of the ribs to the angles, at which point, the upper artery between the first and second, the lower between the second and third ribs, they pierced the internal intercostal muscles and inosculated with the superior intercostal arteries. A peculiarity of these vessels was their very tortuous course, forming right angles at several points in their passage upwards.

The internal epigastric and internal mammary arteries were very much enlarged, and inosculated freely. The epigastrics were so large as to nearly equal the femorals in size.

I examined the thorax very carefully, and endeavored to ascertain the cause of the obliteration, but could discover nothing which threw any light on the subject. The adjacent viscera were in their normal condition, and there was nothing which appeared capable of compressing the vessel in that portion of its course.

Respectfully Yours,

THOS. J. HARRISON, M. D., *Walpole.*

SELECTIONS.

From the American Medical Gazette.

GLANCES AT OPERATIVE SURGERY AND SUBSIDIARY SCIENCE.

BY B. FRANK. PALMER, INVENTOR OF THE PATENT LEG.

A glance at the achievements in operative and mechanical surgery may, at this time, gratify the humane surgeon who is seeking such truth in a collateral science as is essential to his own reputation and indispensable to the welfare of his patient. The crude theories and barbarous practice of the olden times in capital operations are now justly regarded as worthy, if worthy ever, of the ages in which they transpired, when the science of humanity was on a level with the knowledge of operative surgery.

We find it almost difficult to believe that until the time of the great Ambrose Pare, or about the middle of the sixteenth century, the most eminent surgeons did not understand the use of the simple *Ligature* even, as applied to the arteries in amputations of limbs, and we instinctively shudder at the thought of plunging the mangled and bleeding stump into a receptacle of boiling pitch, or cauterizing the arteries with *red-hot* irons, to suppress hemorrhage! And yet, that these were *the methods of preventing death by bleeding*, after amputation, is an unwelcome fact, from which thought gladly recoils to dwell with delight and satisfaction upon the beneficent achievements of the human mind in developing the *humanity* as well as the *utility* of surgical science.

From the day when Pare rescued the first victim from the boiling pitch, until the present time, there has been a noble, continued and finally successful emulation of his humane researches and discoveries by the vigilant Professors of the noble Healing Art; until at length the surgical profession stands pre-eminent in works of human benefaction, and the whole system of surgery, based upon an elevated and sound theory, and graced with the dignity of merciful practice, challenges the admiration of philanthropy and the gratitude of suffering humanity.

"Five things," says Ambrose Pare, "are proper to the duty of a Chirurgeon; to take away that which is superfluous; to restore to their places such things as are displaced; to separate those which are joyned together; to joyn those which are separated, and to *supply the defects of nature*. Thou shall far more easily and happily attain to the knowledge of these things by long use and much exercise, than by much reading of books or daily hearing of teachers. For speech, how perspicuous and elegant soever it may be, cannot so vively impress any thing, as that which is subjected to the faithfull eyes and hands."

* * * * *

He adds, "But he (the Surgeon) supplies those things which are defective, either from infancy or afterwards by accident, as much as

art and nature will suffer. Who sets on an ear, an eye, a nose, or a tooth, fills the palat, supplies the defect of a tongue in part cut of;— who fastens to a hand, an arm, a leg *with fit ligaments workman-like*; who fits doublet bumbasted, or made with iron plates to make the body straight; who fills a shoo too big with cork, or fastens a stocking or cork to a lame man's girdle to help his gate." He says, citing Galen, "If there be any who do the works of Chirurgery without a knowledge of such like things, they are not provident who commit themselves to such;" yet he confesses himself the first to repudiate the method of "his Masters, whereof he was ashamed and agrieved." He took the most daring step in advance of his age and his teachers. His is an example, fit, not for the empiric's or charlatan's, but for the ablest Professor's emulation in this our day, seeing that the human system is now better understood, improved modes of operating in capital cases discovered, demanding reforms in practice, and because a knowledge of subsidiary science furnishes means for the successful substitution of those superior parts of the body which, but a short time since, if once removed, left the patient hopelessly, without any adequate mechanical compensation.

Pare said, he "very well liked the saying of *Celsus*," to wit: "a Chirurgeon must have a strong, stable and intrepid hand, and a mind resolute and merciless;" yet he only meant by this expression, that the intelligent surgeon should proceed judiciously in the performance of a humane and beneficent act, without being disconcerted by the sufferers's cries, or the "judgment of the vain common people who speak ill of chirurgeons, because of their *ignorance*." We venture to mention him as one of the most merciful of men. His teachings contain the most eloquent appeals to the surgeon's sensibility, and express his poignant regret to witness the barbarous treatment of his age.

He says: "Verily, I confess, I have formerly used to stanch the bleeding of members after amputation, after another manner than that I have a little before mentioned, whereof I am ashamed and agrieved. But what should I do? I have observed my masters, whose method I intended to follow, alwaies to do the like, who thought themselves singularly well appointed to stanch a flux of blood, when they were furnished with various store of *hot irons and caustic medicins*, which they would use to the dismembered part, as they, themselves, thought meet; which thing cannot be spoken, or but thought upon without great horror, much lesse acted, for this kind of remedy could not but bring great and tormenting pain to the patient, seeing such fresh wounds made in the quick and sound flesh are endued with exquisite sense. It also took away the opportunity of fitting or putting to an artificial leg or arm, instead of that which was taken off; wherefore I most earnestly entreat all chirurgeons that, leaving this old and *too cruell way of healing*, they would embrace this new, which I think was taught by me by *speciall favor of the sacred Deity*. for I learnt it not of my Masters, nor of any others, neither have I at any time found it used by any."

"I attempted it in many cases, yet so, that at first, in my budding practice thereof, I alwayes had my *cauteries and hot irons in a read-*

ness, that if anything happened otherwise than I expected in this my new work, I might fetch succour from the ancient practice, until at length confirmed by the happy experience of almost an infinite number of particulars, I bid *an eternal adieu to all hot irons and cauteries*. And I think it fit for all surgeons to do like. For antiquity and custome in such things as are performed by Art ought not to have any sway, authority or place contrary to reason, as they oft-times have in civill affaires. Wherefore, let no man say unto us that the ANCIENTS HAVE ALWAYS DONE THUS." He says of amputation also, "You shall cut off as little of that which is sound as you possibly can, yet so that you rather cut away that which is quick than leave behind any thing which has perished according to the advice of *Celsus*. Yet oft-times the commodity of the action of the rest of the part changes this counsell. For if you take those two things into your consideration, they will induce you, in this propounded case and example, to cut off the leg some five fingers' breadth under the knee, for so the patient may more fitly use the rest of his leg—that is, he may go better on the wooden leg; for otherwise, if, according to the common rules of art, you cut it close to that which is perished, the patient will be forced with trouble to *use three legs instead of two*."

With no better artificial means than the thumping Peg-Leg or the more unwieldy one with useless joints of that time (about 1560) Pare's was sound theory and humane practice. And it is not a matter of surprise that M. Petit, Mr. Samuel Cooper and many others have given their adhesion to his teachings for the reason assigned; or that, until a better limb was invented, the venerable "place of election" was clung to with scrupulous tenacity; for Pare says, he "so knew Captain Francis Clerk, when, as his foot was stricken off with an iron bullet shot forth of a man of war, and afterwards recovered and healed up, he was much troubled and wearied with the heavy and unprofitable burden of the rest of his leg; wherefore, though whole and sound, he caused the rest to be cut off some five fingers' breadth below his knee, and verily he useth it with much more ease and facility than before, in the performance of any motion."

It is doubtful wether the old "place of election" was established either by Apollo, Æsculapius, Chiron the Centaur, Podalirious, Machaon, Asclepiades, Hippocrates, Galen, Celsus, or even by the illustrious Pare himself, as he says, (about the year 1560,) that Capt. Clerk "*caused*" the excision at that particular point *for a specific purpose*, and he alludes to no precedent. This being the case, we trust that no surgeon will now consider the venerable "place of election" so sacred to the gods as not to be departed from, or think that all men should, in all coming time, have all legs "stricken off by iron bullets," or yet buckled on precisely like Capt. Clerk's Peg, or like the stumbling stubs of Wellington's Waterloo Elves, at Greenwich, or of Napoleon's vanquished vanguard stumping about the *Hotel des Invalides*.

Dr. Pancoast, in his great work, has well said that the place of amputation "must be held subsidiary to another object, that of affording the greatest facility in the adjustment of the means of artificial support.

Pare and even Baron Larrey had seen no leg so useful as the Peg; but that antique appendage is now seldom seen even on the poorest, as the active sympathy and benevolence of the age tender to such the means of procuring a better substitute.

The method of Mr. B. Bell, of "amputating *above the knee*, when the operation cannot be performed near the ankle or just *below the calf of the leg*, is very extraordinary and erroneous. Yet Mr. Thos. Wakley, the distinguished surgeon and editor of the *London Lancet*, has, in a late number of that eminent journal, given publicity to an equally objectionable theory, to wit: "Amputation of the Leg should never be performed upon children, but the *lower third of the thigh* unhesitatingly selected; for this important reason, that the amputated limb ceases to grow in uniformity with its fellow, and the patient is doomed to the additional inconvenience of having one knee-joint elevated perhaps some inches above the other, and imparting to his gait a peculiarly grotesque appearance."

The *Lancet* is a potential journal, and to Mr. Wakley are we indebted for many acts of personal courtesy while in London—also for an elaborate article upon the Patent Leg, published in the *Lancet*, January 3d, 1852, setting it forth as superior to all others hitherto invented, and as a valuable addition to our means of removing the inconvenience arising from a severe mutilation." So that we reluctantly take exceptions to anything published in the *Lancet*—still feel constrained to state, for the benefit of youthful unfortunates, that the strongest argument that could be adduced in favor of amputations *just below the knee-joint* is found in the fact that the limb "ceases to grow in uniformity with its fellow." For thus we are enabled to support the weight *on the knee*, and having a space of "some inches," in which to arrange the perfect artificial knee-joint, we provide in this case what is inferior only to the best application possible, which is to a stump of about ten inches below the knee, usually, or an amputation at the lower third, with a good flap. It is added, in the *Lancet*, that, in case an "Artificial Leg" is to be employed, "if an entire third of the leg cannot be saved, it is far more to the advantage of the patient to select the *lower third of the thigh* as the point of amputation."—This is certainly a strange and unnatural view, and we are very happy to observe that it is not given as Mr. Wakley's theory, but as the opinion of the present manufacturer of the old Anglesey Leg in London. The solution of this most objectionable opinion is found in the fact, that, without the benefit of a later mechanical improvement than that of Mr Potts—which has served its time well and long—the present manufacturer has no adequate arrangement for an operating joint—it requiring, according to the *Lancet*, about "five inches for the knee;" which elongation of the thigh really would present a "peculiarly grotesque appearance." Here, indeed, is dilemma! And well may the Legmaker, adopting the language of great Pare, (slightly modified,) exclaim: "But what shall I do? I have observed my masters, whose method I intended to follow—"always to do the like!" "But of—somebody I am aggrieved and ashamed!"

With the present means of adopting a substitute to a flexed knee,

so as to give perfect motion of an artificial knee-joint, and without perceptible elongation or enlargement of the thigh beyond its fellow, we find all the superior advantages in this stump (over an amputation above the knee) that are so obvious in the use of the peg-leg; and as there is more danger or loss of life in such practice, it cannot be too strongly reprehended. Amputation at any point *below the knee is preferable in all cases*, if safety in healing be apprehended, and if there be no abnormal condition of the knee-joint to forbid such an election. If the knee be diseased or ankylosed, and the *joint fully extended*, or only *partially flexed*, in such manner as to prevent supporting the weight of the body on the knee, then, indeed, the lower third (or fourth) of the thigh should become the point of election;—otherwise, NEVER.

Since the year 1846 we have applied about two hundred limbs, taking the support upon the knee with perfect use of the artificial knee-joint, and without elongating the thigh but about half an inch, which is not perceptible.

The operation for the application of this leg should be performed just below the tuberosity of the fibula, so as to allow the end of the stump, when flexed, to fall *one inch* back of the thigh, to form a sort of grapple, as it fits the concavity of a soft socket, by which means the limb may be held securely in its place without any appendages connected to the waist or shoulders. The end of the stump is so secure (in the hollow of this flexible socket) from any pressure, that use does not produce excoriation, or inflammation; and we have, in repeated instances, applied the limb to the patients of Professors Mutter and Pancoast, in the Jefferson College, within six weeks from the day of amputation, and without any danger of immediate or remote inconvenience to the wearer.

Mr. Syme has recently revived the practice of amputation at the ankle-joint, which method is strongly recommended in a recent edition of Miller's Surgery, as furnishing a stump "more useful in progression" than an amputation above the ankle. We wish some surgeon who has performed the operation after Mr. Syme's method, or the operation of "*resection of the ankle*," as done by Mr. Wakley, would furnish us a patient, so that we may on another occasion report upon the case. We do not recognize all that is claimed for these operations, (for our uses,) being confident it would not be proper, in either case, to support any considerable weight upon the *end*; and yet, as they afford room for a more perfect artificial joint, and the proper insertion of the *Tendo Achillis*, they are obviously preferable to excision of the foot *through the tarsus*, as done by Baudens or Chopart, or removal at any point above the metatarso-tarsal joints, as performed by Lisfranc.

We are now treating a case of *amputation through the tarsus*, presenting a well-healed and eminently *useful* stump. It is Sedillot's modification of Chopart's operation, in which the cuboid and scaphoid bones remain, to which the flexor muscles are so well attached as to *counteract* the antagonism of the *tendo achillis*; thus retaining the heel in a position to support the weight with comfort, *in active use*.

But we should observe that this is one case out of fifty, and we are almost weekly appealed to by patients who, having suffered this mutilation, find that the *careful treatment of years* will not heal the stumps; and the contraction of the gastrocnemius muscles causes such depression of the cicatrized surface, that the least attempt at walking keeps up ulceration of the cicatrix, which is often followed by *caries of the bones*. And we have taken several such cases to the excellent Jefferson College for amputation *above the ankle*, all of which resulted most favorably.

The practice of disarticulating the knee-joint is, we think, one of the most objectionable of all the capital operations, and for more reasons than we deem proper here to assign, as it is not our intention to express any views relative to the healing, in any case, but such as relate to the subject of mechanical compensation, and the ulterior usefulness and happiness of the patient. The thigh should be selected in preference and the condyles of the femur fully removed.

An eminent surgeon of this city, in his work on surgery, has this valuable advice, to wit: "As much as possible of the thigh should be saved." This, as a rule, is certainly correct; yet the *exception* must be made when the election may encourage disarticulation.

In the same paragraph with this excellent instruction, we regret to find the following: "But the rule does not hold good in the amputation of the leg," as he says, "the bone, from a deficiency of the surrounding muscle, cannot be well covered, and is, therefore, not calculated to bear the pressure of an artificial leg."

An attempt to enable a patient to walk upon *the end of the stump* would be worthy of the time when the stump was baptized in *boiling pitch*, as a preparatory act; when, as the great Surgical Reformer of the sixteenth century said, "*these good men knew no other course.*"

And we have fitted not fewer than 100 limbs where ample flaps had been made *ten inches below the knee*.

We have fitted about 1200 limbs; and examined or obtained reliable statistical information in a great number of additional cases, several hundreds of which are now awaiting treatment.

It is probable that no form of amputation practiced within the last century has escaped our notice, and we have, we believe, examined the work of every leg-maker of any repute on either side of the Atlantic.

We have fitted some 200 limbs to thighs amputated within three inches of the perineum; about 200 to thighs not more than six inches long; nearly 200 upon the knee (flexed); about 200 to short stumps retaining use of the natural joint; some 200 to longer stumps (the best); nearly 200 others, including several for disarticulation at knee, and ankle-joints, and through the foot; some of the latter cases retaining only the os calcis, others the astragalus and calcis, others still a part or all of the bones of the tarsus, and a few retaining the metatarsal bones. We have also made various instruments for congenital deformity.

An ample and well-adjusted *flap* is, in all cases, highly desirable, as it prevents those unpleasant sensations which often arise from the

slightest tension of the thin skin, which otherwise is the only covering of a pointed and protruding bone.

The double flap, of Liston, is admirably suited to our uses; others may be as good; and the circular operation with well formed flaps sometimes furnishes most successfully the *conical shape* we desire. In no case is the patient allowed to support his weight *upon the end of the stump*. Velpeau, Pancoast, Lisfranc, Baudens, and others, cite cases in which it is possible to do this, in case of *disarticulation of the knee or ankle*; and we have seen a German named Gebhardt, who placed the end of his thigh, amputated above the knee, upon a cushion of hair in a peg-leg, and thus walked; and two of our patients, Mr. Moorhead and Mr. Butler, both of this State, having been amputated at the middle third of the leg, can walk in the same manner; but it would be dangerous *in the extreme* to allow this in active use, as in case of falling, or any unusual pressure, the bones might be forced through the skin, causing the worst results. The weight of the body is supported by an even pressure around the whole leg near the knee-joint, (if amputated below the knee,) and a flexible socket, attached by means of auxiliary side-joints, is laced to the thigh, usually to enable the patient to graduate the pressure as he finds most proper.

If the thigh be amputated, the pressure is adjusted to its conical walls near the body, but there must be no direct pressure against the perineum, as excoriation would follow. Also, the *end* must be entirely *free from all pressure*, as well as in case of application below the knee. The joints of the knee and ankle should be made perfectly flexible, so soon as cicatrization will admit of full extension, and bandaging followed up, to facilitate absorption and give the stump a *conical shape*.

In conclusion, we submit the following *places of election*, for the surgeon's consideration:

1st. The *lower third of the leg*, or about ten inches below the inferior edge of the patella. Remove the malleoli fully *always*.

2d. The lowest point possible between the first point and the upper third, at which a good *flap* can be made.

3d. Immediately below the tuberosity of the fibula, if not practicable to save five inches below the patella. *with full use of joint*.

4th. The lower third of the thigh—*ten inches from perineum*. Double flap. Always fully remove the condyles of the femur.

5th. *The utmost length possible*, if necessarily amputated above the fourth place of election.

In a subsequent number we shall continue the subjects touched upon in this, giving curious and interesting statistics of a practice which brings under our observation not fewer than one thousand mutilated persons annually. Until then, assuring the profession of our just appreciation of what appears unanimous good-will evinced toward us and our patients, and hoping a future day to develop more important truths in an art subsidiary to the noblest, we now take leave respectfully to resume our researches for another season.

 PHYSIOLOGY OF THE OVARIES DURING GESTATION.

 BY MADAME JUDSON, OF ST. LOUIS.

Many authors have cited cases of women who menstruated only during pregnancy, and in whom this flow was a sign of pregnancy; but these authors have said nothing of the physiological function of the ovaries during gestation

It is easy enough to understand the modifications which the ovarian vesicles undergo in the non-pregnant state, and the consequent production or elimination of the menses. But the question I wish to answer is this: Why is it that some women menstruate during the first months of their pregnancy, or even during the entire term? It would seem to be because the influence of the ovaries is the same in the pregnant and the non-pregnant female.

A proof that the ovaries continue their office during gestation, is afforded by the fact that many women are threatened with abortion at the menstrual epochs. This is due to the periodic augmentation of the uterine congestion. Thus, also, women who are plethoric and who menstruate easily, most frequently menstruate during gestation; whilst, on the other hand, the generality of women, and those especially of the lymphatic temperament, scarcely ever menstruate during pregnancy. My opinion is, that the persistence of the menses during pregnancy has not always a bad influence on the fœtus, because in a plethoric woman, only the blood flows, which is not needed for the development of the fœtus. This may happen even on the hypothesis of one ovary only acting at a time.

I conclude, then, that the fœtus can be developed, even when the mother menstruates. This is true of twin conceptions also.

The retention, in the walls of the uterus, of the blood which ought to be expelled, excites painless contractions of that organ to expel it. The mode in which the expelled blood separates the membranes of the ovum from the uterus, is well described by Cazeau, (3d edition, page 319) For example, when above the ovum there forms a false bag of waters, and this false collection breaks, this makes its passage outwardly without injury to the fœtus or mother. An apoplexy of the placenta produces the same effects. When these accidents happen, it is supposed that abortion is inevitable, but this is by no means the case. Menstruation is equally harmless. We must not, however, regard all these sanguine uterine fluxes as menstrual. They are sometimes owing to a pathological state of the os uteri. In other cases they depend on placental apoplexy, or on the morbid action of the uterine vessels, or, in the last weeks of pregnancy, on a partial separation of the placenta, when it is inserted over the os uteri; but these last cases are rare. After a cautious diagnosis, there is but little danger of error. Only the periodic flow can be regarded as the true menses; for I contend that this only is produced by the periodic evolution and separation of the graafian vesicle. In my researches I could never find evidence that both the ovaries acted at once. I am led to believe that they act alternately.

During my residence at the *Maternity* at Paris—I have seen many women, dead at various epochs after delivery—I have found in their ovaries the *corpus luteum*. The question is, whence is this corpus luteum? Has it been caused by the ovule which has been developed to maturity, or is it the result of an effort at menstruation during the last stage of pregnancy? I incline strongly to the latter view. We know also that two or three ovules may be simultaneously fecundated, and that successive fecundations may take place in a short time; but we have no example of more than one *corpus luteum* being found in the ovaries of women dead after childbirth, even with twins. This renders it probable that the corpus luteum, which we do find, depends on the evolution of the last vesicle in the last monthly period of gestation. This view has not, I think, been previously advanced.—*St. Louis Medical Journal and Med. Counsellor.*

EDITORIAL.

SIXTH ANNUAL COMMENCEMENT OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF MICHIGAN.—On the 27th of March this anniversary occurred, and one of the most prosperous sessions of the Medical College was brought to a close.

The class in attendance upon the course of instruction numbered, as per catalogue, 152. These were all *bona fide* students—neither occasional visitors whose names were solicited to swell the list, or men of straw. They were from various localities, extending over some twenty States of the Union, the District of Columbia, and the Canadas, and although we have had considerable opportunity of observation of medical students and schools both East and West, we have no hesitation in saying that a more quiet, gentlemanly, industrious and intelligent class it has not been our fortune to see assembled. Though there were doubtless numerous exceptions as regard to means, the majority of them appeared like men who had been largely dependent upon their own exertions for their preliminary and professional education—men having an ardent desire for knowledge, and who had already acquired habits of industry and application, and these habits, combined with the daily examinations by which proficiency is tested, and the writing and public reading, by the senior portion of the class, of monthly theses, by which a literary taste is excited and cultivated—have given a prevailing air of studiousness, of zeal and enthusiasm, which has much delighted those engaged in their instruc-

tion, encouraged them to more vigorous efforts, and caused those efforts to be attended with much greater success.

By a judicious devotion, by act of the Regents, of a considerable sum yearly to purposes of illustration, these means are constantly increased. The laboratory is supplied with a most complete variety of apparatus and chemicals. The museum contains a very choice collection of anatomical and pathological specimens and representations, extending over almost the entire field of normal and abnormal formations; and the surgical department, both general and that pertaining to the diseases of females, is supplied with the proper instruments and appliances for showing the various processes belonging to the art. Dermal pathology, too often regarded as a "speciality," and excluded from the course of instruction in our schools, receives due attention and is illustrated by a collection of representations embracing William's large plates and Erasmus Wilson's splendid portraits of skin diseases; and the department of *Materia Medica*, in pictorial representations and actual specimens, embracing a collection recently imported from France, of nearly six hundred samples from the organic kingdoms, is illustrated almost as completely as is possible.

The course of lectures, continuing under these circumstances for six months, was followed by the private examination of candidates for graduation and balloting for them, and this succeeded by reading of theses and a public examination of those who were successful in receiving the approval of their teachers, the latter continuing two days.

The commencement exercises to which we referred in the beginning of this article, followed, and were of a very interesting character. They consisted of prayer, the reading of a selected thesis by one of the class, conferring of degrees, address to the graduates and benediction; these various exercises interspersed with excellent music. The address to the graduates, delivered by the President of the University, H. P. Tappan, D. D. L. L. D., as we present it entire to our readers, being also published in a pamphlet form by order of the Board of Regents, having been requested by the State Medical Society whose members were present at the delivery, and by the Graduates, we shall not attempt to characterize further than to say, that it was listened to with universal delight and approval by a crowded audience, embracing men well qualified to judge, from different parts of the State; and if it shall afford a tithe of the pleasure and profit to the readers which it did to the listeners, as it came from the lips of the author, it will richly repay a careful perusal from all. We particularly commend its just and high-toned sentiments and chaste

and beautiful expressions to the notice of our readers. It can hardly fail to inspire higher views of the profession and its holy mission.

The Faculty of the Medical Department of the University, aided by the Regents and sustained by the profession, are laboring to give a thorough medical education to those committed to their charge, and they are desirous that the members of the profession throughout the State should witness their efforts and judge of their success, and will ever be gratified with the presence of physicians during the course of lectures, or at the examinations and exercises. We are gratified that the State Society have appointed a committee of their number to be present at these exercises, and we hope that others will often visit the institution and see whether those engaged in its management are faithful to their trust.

We subjoin the names of the graduates and the subjects of their theses:

- John H. Baird—Vaccine Disease.
 Thomas R. Bruce—Cathartics. †
 Robert Charlton—Physiological Effects of Alcohol.
 William H. Dean—Gastric Digestion.
 Frederick C. Dennison—Acute Pneumonia.
 Thos. T. S. Harrison—Origin and Destination of Fibrin. ‡
 Benj. J. Hershey—Bubo. †
 E. M. Jenkins—Hernia.
 Wm. S. Johnson—Iodine.
 B. D. Keator—Vis Vitalis.
 Edgar R. Knapp—Sounds of the Chest.
 Oliver Laning—Evidences of Gestation.
 Hiram G. Mace—Action of Medicines.
 Henry C. May—Food and Digestion.*
 Elisha S. Merriman—Mental Hygiene.
 Charles C. Miller—Malaria.
 Alfred Nash—Diabetes Mellitus. †
 Francis M. Oakley—Arsenic.
 A. O. Potter—Repair of Fractures.
 Charles H. Sackrider—Ether and Chloroform.
 Thaddeus P. Seeley—The Capillary Power. †
 R. S. Spilman—Eclampsia Parturientium.
 A. A. Thompson—Etiology of Apoplexy. †

‡ To be published.

* Read at Commencement.

† Read during examination.

John T. Turner—Psychical Affections.

Asa K. Warren—Medical Education.

Arvin F. Whelan—Animal Heat.


Ellwood T. White—Digestion.

N. S. Whiton—Amenorrhœa.

Charles Winne—Scarlatina.

Geo. F. Witter—Quinia.

Dr. Tappan's address will appear in the June number.

 We present to our readers, in the present number of the Journal, an article on the Subject of Amputations as affecting the ulterior happiness of the Patient. We have done so for the reason that it contains many hints for the surgeon, which being taken into consideration by him in selecting the point for operation in the lower extremities, may be of the utmost importance to the Patient. We are aware that cases do occur in which the Surgeon has no choice, but must necessarily operate without any reference to future consequence. Such are, however, rare, and mostly occur in the upper part of the thigh.

In this modern age of improvement and invention, there seems no necessity for those who have been so unfortunate as to lose their limbs, whether upper or lower, of going unprovided with others, which really or quite fulfil the same intention as the original member. This fact is more particularly true in reference to the lower than the upper extremities. Yet we are informed that a gentleman in Boston, Mass., has so far succeeded as to produce an artificial hand, which, as far as use and elegance is concerned, is scarcely distinguishable from its natural member.

With the lower extremities, it is different. Artificial legs have become so perfect as almost to be beyond the art of improvements. This is the case with "*Palmer's artificial leg*, which has been before the public for some years, and of which some 1200 are now in use. We have had the pleasure several times of hearing the opinion of Ezra Rood, Esq., a gentleman in this city, who has worn an artificial limb for some twenty years—Palmer's leg, being the fourth kind in use by him—that nothing can compare to it, both in lightness, durability and comfort, whereas, before it was with difficulty, he could get about; he can now attend to his business with the greatest of ease; he says it is nearly three years since he procured it, and no consideration would tempt him to lay it aside.

Our space does not admit of extending our observations farther. We recommend a careful perusal of the article itself, and especially the remarks concerning the legs, which we think the most perfect of any yet made.

TO OUR CORRESPONDENTS—THE STATE MED. SOCIETY.—Having on several occasions received communications addressed to us as conductors of this Journal, which contained such exceptionable personalities, that they could not be admitted without violating the proprieties of social life; we take this occasion, therefore, to say, that articles designed for publication in the *Peninsular Journal* must be written with a view to advance the true interests of the profession, and not to minister to the gratification of the personal ill-will of individuals, or to promote the mere ambition of combinations.

All articles written in view of this rule, whether containing mere articles of medical news, or notices of new facts illustrative of principles already recognized, or tending to the establishment of new ones; whether containing any thing novel in either department of physics, and of available utility in medicine, or an account of new remedies or new applications of those of acknowledged value, will be thankfully received. To those who have heretofore honored us in that way, we return our sincere acknowledgments and hope still to be the medium of making known the results of their labors to the medical public.


To the State Medical Society we have especial reason to feel grateful for the honorable manner in which it reiterated the expression of its confidence in the conductors of this Journal, and the *substantial manner* in which it gave them its support. Called into existence by the fiat of the State Society, we are willing to acknowledge and to have acknowledged its paternity, whilst we give assurance, that so long as it is in the hands of the present proprietors, it shall not be found wanting in fidelity to the cardinal interests of the Society or the best good of the profession at large, which we deem to be identical.


Correspondents will please prefix an appropriate heading to their communications and will especially oblige the compositors by writing *only on one side of their paper*. We shall publish most cheerfully the transactions of county or district societies, which contain any items of intelligence or discussions of practical or scientific interest. We have on hand a paper emanating from a respectable county society, written apparently with a design of showing that the Paradise of quacks is not limited by any particular metes or bounds, but is made up of all that region, to which knaves have acquired the power,

if not the right of eminent domain. As that is not an item of medical news, we ask, without the design of giving offence, to be excused from publishing the paper, as the case related in it is not designed to establish any other point or illustrate any principle. Will not some member of the society alluded to write an account of the eruptive disease which prevailed in their immediate vicinity some three or four years ago?

MISCELLANEOUS.

CHLOROFORM IN POISONING BY STRYCHNIA.—Dr. O. B. Knoch, of St. Joseph, Mo., reports in the *St. Louis Med. Journal* the case of a man who swallowed, for the purpose of self-destruction, six grains of strychnia. He was found, in twenty minutes after, insensible on the pavement where he had fallen in a convulsion—his whole muscular system convulsed; pulse small, breathing hard and agitated. There being no stomach-pump at hand, he was given XV gr. Sulphate of Zinc with XX gr. Ipecac followed by warm water, which he swallowed with great difficulty; but vomiting not coming on by this means, it was excited by tickling the throat with a feather until the stomach appeared entirely emptied. He remained, however, utterly unconscious, with violent contractions of the whole muscular system occurring at short intervals. He then gave him Chloroform, a small tea-spoon full mixed with a little water, after which he had one slight convulsion. The dose was repeated, after which they entirely ceased, and he soon sat up and conversed intelligently.

 The Electro-Chemical Baths are now becoming all the rage, especially among the Homœopaths, who, finding their “occupation gone,” are now seeking some new weapon for proselyting. They extract mercury, lead, and other poisons by these baths, to astonish the natives. They succeed best by slyly slipping the metals into the tub, along with the patient.—*Am. Med. Gazette.*

 The Oleine, separated from Cod Liver Oil, is now coming into use very extensively, and is reported to be free from many of the objections to the oil, never offending either the palate or the stomach, and being more nutritious. Like the oil, it may be given alone or combined with Quina.—*Am. Med. Gazette.*

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NO. XII.

ORIGINAL COMMUNICATIONS.

ARTICLE 1.

Ninth Annual Session of the American Medical Association.

The Association met at Fireman's Hall, at 11 o'clock, A. M., and was called to order by the President, Dr. G. B. Wood, of Pennsylvania. Dr. D. Tilden, of Ohio, Vice President, occupied a seat upon the platform. Dr. Wm. Brodie, of Detroit, Secretary.

Dr. Pitcher, of Michigan, in behalf of the Committee of Arrangements, said :

“MR. PRESIDENT—In the name of the Physicians of Michigan, who are here represented by delegates from their State, District and local societies, we welcome the members of the American Medical Association to the State and city of our adoption.

As children who have wandered from the family altar, to improve their fortunes in new and distant lands, would meet with bounding hearts the patriarch of their early home, so we, whose lot has been cast, in the forests of the West, now greet with kind emotions the delegates from the old Colonial States, hallowed in our memories by their revolutionary associations, honored for the elegance and durability of their seats of learning, and cherished as the home or the birth-place of many of the most brilliant and highly cultivated intellects in our national domain.

With a fraternal attachment no less ardent, we receive the members coming from those other States of the confederacy, which, like our own, have a position among the stars of the Union, but by the accident of birth are excluded from a place among the stripes of our national escutcheon.

And to our Brethren who are here, by invitation, from the British Provinces in America, with whom, from a common ancestry, we have derived, by inheritance, our best and earliest ideas of civil liberty, much of our literature and many of the practical precepts which regulate our art, we offer a like and cordial reception.

Although actively engaged in the battle of life, and earnestly struggling to overcome the obstacles which, in an undeveloped country, lie in the way of professional success, we have striven like the devoted Parsee to keep alive the fire which, in our youth, we kindled at the altars of those Magi who now come—not like the wise men of the East, under the guidance of a new risen star, by acts of devotion to celebrate the advent of a Messiah—but to receive from us, on this ground, from which the foot-prints of the savage have scarcely been erased by the plow-share of the white man; where the echoes of the boat-song of the lively Gascon may still be heard between the strokes of the paddle-wheel and the whistlings of the locomotive, the tokens of a sincere friendship, the acknowledgment of a legitimate paternity, and the homage due from filial and grateful hearts.

The student of our political history is well aware that, under the pressure of exterior force, we have been compelled, on five different occasions, to change our national colors, but never to abjure the faith of our political sires;—so now, we intend steadfastly to stand by the true in medicine, under all the forms of temptation, as we will, under all the phases of political fanaticism, defend the ark of the covenant of our political fathers.

We pray that the meetings of this Association, though purely scientific in its aim, may be so conducted as to become instrumental in promoting these great ends.

Again, gentlemen, we bid you, from whatever land, or State, or section of the country you may have come, in the name of common brotherhood in science, a warm and cordial welcome.”

The roll was then called by Dr. Wister, of Pennsylvania.

On motion of Dr. Thomson, of Delaware, a recess of fifteen minutes was taken to allow the delegates from the respective States to report one member from each State represented, as a Committee to nominate officers for the ensuing year.

At the expiration of the recess, the Association was called to order, and the different State delegations then reported their choice, respectively of delegate to serve on the nominating Committee, which was constituted as follows :

- Maine*—N. P. MONROE.
New Hampshire—H. PEIRCE.
Vermont—C. L. ALLEN.
Massachusetts—H. H. CHILDS.
Rhode Island—J. E. WARREN.
Connecticut—DAVID HARRISON.
New York—WILLIAM ROCKWELL.
New Jersey—L. A. SMITH.
Pennsylvania—JOHN NEILL.
Delaware—J. W. THOMSON.
Maryland—P. WROTH.
South Carolina—E. GEDDINGS.
Tennessee—J. B. LINDSLEY.
Kentucky—W. L. SUTTON.
Minnesota—C. W. LE BOUTILLIER.
Michigan—M. GUNN.
Ohio—THOS. W. GORDON.
Indiana—DR. WINTON.
Illinois—H. NOBLE.
Wisconsin—W. H. BRISBANE.
U. S. Army—CHAS. TRIPLER.
Iowa—DR. MCGUGIN.

After the Nominating Committee had retired, Dr. Pitcher, of Michigan, from the Committee of Arrangements, submitted the following report:

In conformity to the domestic and social usages of the place of meeting, the Committee have to suggest that the sessions of the Association take place in accordance with the following plan, and that they commence and terminate each day at the hours designated therein :

TUESDAY—Morning session begins at 11 A. M. and ends at half past 12 M. Afternoon session begins at 2 P. M. and ends at 5 P. M.

WEDNESDAY—Morning session begins at 9 A. M. and ends at half past 12 M. Afternoon no session.

THURSDAY—Morning session begins at 9 A. M. and ends at half past 12 M. Afternoon session begins at 2 and ends at 5 P. M.

FRIDAY—Morning session begins at 9 o'clock A. M.

This arrangement of the hours of meeting and adjournment conforms, also, to the suggestions contained in the resolutions of Dr. N. S. Davis, of Illinois, and which were, on his motion, referred to this Committee for their consideration by a vote of the Association. Regard for the mover of the resolutions, and the authority of the body by which they were submitted by us, requires from the Committee a respectful reply. Your Committee, in view of the existing state of our professional literature, feel reluctant to advise a departure from the present mode of laboring to promote a higher degree of culture in those preparing to become members of the medical profession, and to establish in those already engaged in its duties, a habit of recording the results of their observations. They think that the effects of such a change, as is contemplated in the resolutions of Professor Davis, and the more amplified expression of his idea, contained in the address of the then President, Dr. Pope, of Missouri, delivered at Philadelphia, in 1855, can be easily foreseen. To a few who are gifted with colloquial powers, and to others who have undergone, the discipline required to fit them for public debate, the interest of the meetings conducted upon the plan proposed in the resolutions would be greatly increased, but as the great body of the Association would, voluntarily, it is true, be excluded from participation in these exercises, the enthusiasm which now characterizes our anniversaries, would subside, and with it the professional *esprit du corps*, which has been already developed through the instrumentality of the Association. We presume that the objects for which this organization was effected, have not been lost sight of by the majority of its members. Neither can it be pretended that those purposes have been so far accomplished as to justify us in laying it aside, or of diverting it from its original design.

Your Committee feel that the profession has no right to rail at the public for misappreciation of it, so long as we continue to admit men into its folds destitute of that knowledge, both in nature and degree, necessary to make a decent appearance in general society, or to fit a man for the more ordinary and less responsible pursuits of life. From the early records of the Association, it appears that this conviction, on the part of the profession of the United States connected with the design of reforming, in certain particulars, the medical schools of our country, led to its organization in 1847, and until its mission in both respects has been accomplished, the Committee would reluctantly recommend the adoption of any measure tending in their judgment to divert it from the design of its creation. Thus far the in-

fluence of the Association has gradually extended itself into the rank and file of the profession. It has increased the number of writers, given an impulse to the medical mind, and encouraged a useful and laborious class, gratified to observe and willing to submit their observations to the public, because they can be incorporated into the body of the transactions without being subjected to a sifting criticism. It is true, that in this way, articles have been printed that did not always enure to the credit of the Association, but at the same time, and by that means, motion and fertility have been given to minds that would have lain fallow and unproductive, which the dread of the conspicuity, belonging to a mental gymnasium, would have driven into deeper obscurity. The Committee, however, whilst they would resist any tendency to radicalism in their own opinions, cannot dismiss the subject without expressing their belief that, in order to secure the objects of our organization, it is as necessary to increase the breadth and depth of its base as to elevate the shaft designed to spring from it, for, without such preparation, the superstructure, however beautiful in aspect, would be of transient duration.

Having arranged the hours of meeting and adjourning, so as to place it into the power of the Association to adopt or reject, without inconvenience, the proposition of Dr. Davis, the Committee respectfully ask to be excused from submitting a distinct proposition on the subject.

By order of the Committee of Arrangements,

Z. PITCHER, *Chairman.*

The report was accepted.

The President announced the death of the eminent Dr. John C. Warren, of Boston, Mass., in that city, on Sunday morning.

Dr. Childs, of Mass., felt compelled to say a few words in this connection. He had been associated with the deceased for more than half a century, and should feel that he had been derelict of duty if he neglected to speak in his laudation. Dr. Warren was the nephew of Joseph Warren, who fell gloriously at the battle of Bunker Hill. He was at the head of his profession in Massachusetts—had been President of the State Medical Society, and occupant of other elevated medical positions. His professional reputation was high, and his personal reputation spotless. His fame was not confined to Massachusetts. Though devoted to medical science, he was not limited to that alone, but paid attention to every branch of literature and art. If young members of the profession would be useful and eminent, they should follow the example of Dr. John C. Warren. To the

older, the speaker would point out Dr. W.'s moral character as an exemplar. Such a life as his inevitably terminates in a death beatified by a surety of eternal happiness.

Dr. Gross, of Kentucky, made some remarks eulogistic of the deceased. He alluded to his high reputation—a reputation he observed, not confined to America, but extending to every corner of the civilized world. Dr. Warren was the Nestor of American surgery. Dr. G. concluded by offering the following:

Resolved, That a Committee of five be appointed to draft resolutions expressive of the feelings of this Association at the loss of their late associate, Dr. John C. Warren.

The resolution was adopted, and the President appointed as such Committee, Dr. Gross of Kentucky, Dr. Childs of Massachusetts, Dr. Wood of New York, Dr. Pitcher of Michigan, and Dr. Geddings of South Carolina.

On motion, the Association adjourned to 2 P. M.

AFTERNOON SESSION.

The President called the Association to order at 2 o'clock.

The Secretary read a letter from Dr. Grafton Tyler, of the District of Columbia, one of the Vice Presidents, excusing his absence.

He also read letters from the State Medical Society of Tennessee, and from the University of Nashville, inviting the Association to hold its next annual session at Nashville, Tennessee. Also, one tendering the use of the Hall of Representatives of that State for the purposes of said session.

On motion of Dr. Brodie, of Michigan, referred to Committee on Nominations.

The Committee on Nominations submitted the following report:

The Committee on Nominations unanimously nominate the following officers of the American Medical Association for the ensuing year:

President—Dr. Zina Pitcher, of Detroit.

Vice Presidents—Drs. Thomas W. Blatchford, of New York; Wm. K. Bowling, of Tennessee; E. Geddings, of South Carolina; W. H. Brisbane, of Wisconsin.

Secretaries—Drs. W. Brodie, of Michigan; R. C. Foster, of Tennessee.

Treasurer—Dr. Casper Wister, of Pennsylvania.

The report was accepted and the nominations unanimously confirmed.

On motion of Dr. Atlee, of Pennsylvania, the President was requested to deliver his annual address.

At the conclusion of the address, on motion of Dr. Atlee, of Pa.,

Resolved, That the thanks of the Association be presented to our late President for the able and interesting parting address he has just delivered, and that he be requested to present to the Committee of Publication a copy, for preservation in our transactions.

On motion of Dr. Atlee, of Pa.,

Resolved, That a Committee of three be appointed to inform the President and Vice Presidents elect of their election, and conduct them to their seats.

The President appointed as such Committee, Drs. Atlee, of Pa., Reeves, of Ohio, and Sutton, of Ky.

Upon taking the chair, Dr. Pitcher said:

“Although fully aware of my indebtedness, for this distinction, to your observance of a custom equivalent in force to positive law, of selecting your presiding officer, in each successive year, from the State in which the meeting of the Association is held, I feel myself more honored by your partiality, than if I had received the same mark of respect from any other body of men known to the annals of our country.

“This sentiment of regard for the body towards which I now hold, by this act of yours, so delicate and interesting a relation, has been inspired by a contemplation of the ideal of the physician, and strengthened by my growing acquaintance with the individuals which compose it.

“Being unaccustomed to presiding in deliberative assemblies, I shall throw myself upon the indulgence of the Association, and rely upon the kindness and intelligent co-operation of the individual members for assistance, in performing the duties of the chair.

“Whilst thanking you most cordially for this expression of confidence, I can only assure you that such abilities as I possess shall be devoted to the prosperity of the Association and the harmony of its proceedings.”

Dr. Frost, of Charleston, S. C., offered the following resolution, which was adopted:

Resolved, That the thanks of this Association are due to the retiring officers for the zealous and efficient manner in which their duties have been performed; to our late President, for the courtesy and ability with which he has presided over our deliberations; to all the officers, for their attention to the laborious duties of their stations—not excepting our Committee on Publication, to whom we must feel indebted for the satisfactory form in which the volume of the transactions appears.

On motion of Dr. Gunn, of Mich.,

Resolved, That the resolution passed at St. Louis, requiring a majority of the Committee on Publication to be appointed from residents of the place where the meeting is held; be repealed.

Dr. Phelps, of N. Y., offered the following :

Whereas, The pleasure and satisfaction of attending the deliberations of this Association would be greatly enhanced, the duties of the secretaries and reporters facilitated, and order at the same time secured, by the observance of two things, to wit: first, that the audience be put in possession of the name and residence of the speaker ; and, secondly, that they be enabled distinctly to hear what he has to say ; therefore,

Resolved, That no one be permitted to address the Association, except he shall have first given his name and residence, which shall be distinctly announced from the chair, and the member be required to go forward and speak from the stand, and not more than ten minutes at one time.

A motion to lay on the table was lost. The resolution was then adopted.

At the request of Dr. Gross, of Ky., his report upon "The Causes that Retard Medical Education and Literature," was made the special order for Wednesday at 10 o'clock.

Dr. Palmer, of Ill., from the Committee on Prize Essays and Volunteer Communications, submitted the following :

"The Committee on Prize Essays and Volunteer Communications' report, that some months since they issued a card, which was extensively published in the medical journals, setting forth the terms upon which essays intended for prizes would be received ; but that the number of papers presented has been but four.

"By referring to the past records of the Association, it is found that the numbers received by preceding Committees have been, in 1852, sixteen ; in 1853, fifteen ; in 1854, nine ; in 1855, six ; and in 1856, four. Your Committee beg leave to call attention to this almost regular and quite rapid decrease in the number of essays presented, for the purpose of having the Association consider whether there be not danger that the number which may hereafter be furnished, will be so small as to afford insufficient range of comparison and choice to cause the preference shown to be much valued, if, indeed, presentations do not cease altogether, and whether any means should be devised for preventing such a result.

"The essays received by your Committee have been subjected to a careful examination ; and while admitting that they all possess a degree of merit, which would render them suggestive and useful, if given to the profession, still, in their opinion, but one manifests that evidence of careful and laborious investigation, that wide scope and rigid accuracy of logical reasoning, that chasteness of expression and artistic skill in the presentation of the subject, as to furnish sufficient claim for awarding a prize by this body.

"But one prize is therefore awarded. The essay selected for this honor, bears the title—'An Essay on the Arterial Circulation.'

"It is regarded by the Committee as possessing the merits just alluded to, and while not wishing to give an unqualified endorsement of all the views which it contains, they regard it as possessing not only interest in its physiological and scientific relations, but also real value in its pathological and practical bearings.

"The production has considerable length, and by the fullness with which the views advanced are discussed, it partakes as much of the nature of a treatise as an essay. It has, at least, one quality which Lord Bacon considered necessary to a treatise, as distinguished from an essay,—it required a degree of leisure on the part of the writer, and will require the same on the part of the reader for him fully to appreciate its value.

"The essay bears the motto—'*Una est Veritas.*'"

"(Signed)

A. B. PALMER, Ch'n.
SAMUEL DENTON,
SILAS H. DOUGLASS,
AB'M SAGER.
E. ANDREWS.

"On breaking the seal of the accompanying packet, Dr. Henry Hartshorn, of Philadelphia, Pa., was found to be the successful essayist."

The report was accepted.

Dr. Blatchford, of N. Y., from the Committee on "Hydrophobia, and the Connection of the Season of the Year with its Prevalence," read a report thereon. The Committee, in conclusion, submitted the following resolution, which was adopted:

Resolved, That the Secretary transmit to the Governor of each State a copy of the statistical part of this report, with the respectful request that he would bring the subject before the Legislature of the State over which he presides, that in their wisdom they may devise and unite upon a plan by which the evil may be mitigated, if not removed.

The Committee on Nominations reported in favor of holding the next annual meeting of the Association at Nashville, Tenn.

Dr. Gross, of Ky., moved to strike out "Nashville, Tenn.," and insert "Louisville, Ky." He thought Nashville at present difficult of access.

Dr. Geddings, of S. C., and Lindsley, of Tenn., advocated the adoption of the report.

Dr. Gross withdrew his amendment and the report was adopted.

Dr. Wister, of Pa., from the Committee on Publication, made the annual report. It states that the first copies of the transactions of the last session of the Association were issued on the 10th of Novem-

ber, 1855; that 1000 copies were printed; that the aggregate expense of printing, illustrating and binding was \$1,922.70; that the distribution of the volume was effected, in every possible instance, by express; that Drs. C. Hooker of Ct., Alden March of Albany, J. L. Atlee of Pa., W. Brodie of Mich., C. B. Gibson of Richmond, E. L. Beadle of N. Y., H. W. Dessaussure of S. C., C. A. Pope of Mo., D. H. Storer of Mass., T. G. Richardson of Ky., J. Moran of R. I., T. Miller of D. C., F. E. B. Hintze of Md., L. P. Bush of Del., Z. Pitcher of Mich., and J. B. Lindsley of Tenn., have rendered essential service to the Association—some in procuring subscriptions to the volume, and all by cordial co-operation in its distribution; that it is important to secure efficient co-operation in every State by the appointment of gentlemen whose duty it shall be to aid in procuring subscriptions for and circulating the transactions; that Connecticut is especially to be commended for her services in this particular; that not a little embarrassment was experienced by the committee in restoring to the list of permanent members the names of those who had been left off by order of the Association for non-payment of assessments; that they had endeavored, however, by careful comparison of the various lists, to supply all omissions; that the committee had been reluctantly obliged to omit from the transactions two valuable reports on epidemic diseases—by Dr. L. H. Anderson, of Ala., and Dr. E. D. Fenner, of New Orleans,—but, as they had not been presented to the Association, and acted on by that body, there was no other alternative; that the following resolution, passed at the last session, should be strictly enforced:

Resolved, That, hereafter, beginning with the session of 1856, no report, or other paper, shall be entitled to publication in the volume for the year in which it shall be presented to the Association, unless it be placed in the hands of the Committee of Publication on or before June first.

The report further states that the number of volumes of transactions now remaining on hand is as follows: of Vol. I. 41, of Vol. II. 9, of Vol. III. 32, of Vol. IV. 7, of Vol. V. 316, of Vol. VI. 66, of Vol. VII. 120, of Vol. VIII. 351; that some of the leading journals abroad have expressed a strong desire to complete their sets, and it rests with the Association to determine whether the missing numbers shall be supplied; that, as only seven complete sets of the transactions are now in the possession of the Association, the committee recommend that no copy of either of the eight volumes which is necessary to the complete sets now remaining shall be disposed of separately, or with any number of volumes short of a complete set.

Dr. Atlee, of Pa., made some remarks upon the report, in the course of which he stated that the Smithsonian Institution had been offered as a permanent place of session for the Association. He concluded by moving that the Committee on Publication preserve five complete sets of the proceedings. Carried.

Dr. Wood, of Philadelphia, moved to refer the nomination of standing committees to the Committee on Nominations. Carried.

The same gentleman made a request in behalf of Dr. Hamilton, that the committee of which Dr. H. is chairman, may be continued for another year, it not being prepared to report at present. Granted.

Dr. Breckenridge, of Ky., stated that the Committee on Medical Literature, was ready to report.

The President suggested that the reading of the report follow that of the report of Dr. Gross, which had been made the special order for Wednesday, at 10 A. M.

Dr. Palmer, of Chicago, stated that the Committee on Plan of Organization for State and County Medical Societies was ready to report.

Dr. Pomeroy, of N. Y., moved to reconsider the resolution requiring a member, when speaking, to stand upon the platform, and not to occupy more than ten minutes in his remarks. Lost.

Dr. Smith, of N. J., moved that that portion of the resolution requiring members, when speaking, to take the stand, be rescinded. Carried.

Dr. Atlee, of Pa., moved to refer the prize essay of Dr. Hartshorn on Arterial Circulation, and the report of Dr. Blatchford on Hydrophobia, to the Committee on Publication. Carried.

Dr. Wister, of Pa., the Treasurer, read his annual report. It recommends that the Treasurer be requested, at an early date after the adjournment of the present meeting, to address a circular to each permanent member, announcing the abrogation of the resolution of 1854—making a yearly subscription to the transactions obligatory—and the consequent restoration to membership of all those dropped from the published list of that year,—advertising, also, the practicability of procuring back numbers of the transactions, with information as to the cost at which the series of volumes may be rendered complete, or an entire set furnished by the Association.

The account of the Treasurer with the Association is as follows:

DR.

To cash paid Dr. John L. Atlee, of Committee on Washington Monument Stone	\$498 70
To cash paid C. B. Norton, for portorage and packing Vol. VII., in New York	8 00
To cash paid J. D. Trask, for Prize Essay	100 00
To cash paid for postage of Secretary	2 50
To cash paid D. C. Baxter, for engravings of Vol. VIII.	72 75
To cash paid for postage of Chairman of Publication Committee.	4 09
To cash paid Thos. Sinclair & Co., for lithographs for Vol. VIII.	101 20
To cash paid T. R. & P. G. Collins, for printing and binding 1000 copies of Vol. VIII.	1,748 75
To cash paid T. R. & P. G. Collins, for binding 25 copies of Vol. VI. and printing notices.	4 52
To cash paid H. Barnes, for distribution of Vol. VIII. and services as clerk	50 00
To cash paid T. R. & P. G. Collins, for printing notices	1 25
To cash paid Blanchard & Lea, for freight, portorage, boxes, &c., for Vol. VIII.	34 99
To cash paid for postage, envelopes and stationery of Treasurer	6 99
To balance	950 52
	<hr/>
	\$3,584 26

CR.

By cash received from Dr. Isaac Wood, being the balance in the Treasury April 30th, 1855	\$1,015 26
By cash received from Dr. Isaac Wood, being the balance in the Treasury of prize essay fund, April 30th, 1855.	100 00
By cash received from assessment and the sale of transactions.	2,150 50
By cash received from Dr. E. D. Beadle for the sale of transactions ..	12 00
By cash received from Dr. Wm. Brodie for do.	12 00
By cash received from Dr. A. March for do.	24 00
By cash received from Messrs. Blanchard & Lea for do.	102 50
By cash received from Dr. Chas. Hooker for do.	168 00
	<hr/>
	\$3,584 26

The correctness of this account is certified to by the proper Committee.

The report was accepted, and referred to the Committee on Publication.

Dr. McNulty, of the New York Academy of Medicine, offered a resolution, that a Committee of one from each State be appointed by the Committee on Nominations, to prepare, and report to the Association during the present session, an address to the people of the United States, setting forth the strong claims the medical profession have on their respect, gratitude and confidence.

Dr. McNulty explained the purpose for which he offered the resolution. Many people, he said, had a prejudice against the medical profession for holding to the dignities of their calling, and entertained the idea that the science of medicine was a collection of absurdities and superstitions. He wanted to show clearly that this is not the fact, and, in this view, he thought the address proposed would have a beneficial effect.

Dr. Kittredge moved to amend the resolution by making it read that every member of the Association should take the stump and defend the cause.

After a few other remarks, the resolution was withdrawn.

Dr. Gross, of Ky., stated that Dr. Wood, of New York, who was then in the meeting, had lately performed an operation in an extraordinary case—removing a jaw-bone—and moved that a time be appointed for the Association to examine the part extirpated.

Dr. Wood said he had not with him the article spoken of by the preceding speaker, but would lay it on the desk of the President in the morning.

Dr. Gunn, of Mich., reported the following names of members by invitation: Dr. P. N. Curtis, of Tecumseh, Mich., proposed by Dr. M. A. Patterson, of Tecumseh; Dr. C. West, of Indiana, proposed by Dr. Z. Pitcher, of Detroit; Dr. James Bronson, of Newton Falls, Ohio, proposed by Dr. Thomas W. Gordon, delegate from the Ohio Medical Society; Dr. Benjamin Stanton, of Salem, Ohio, proposed by Dr. Geo. Mendenhall, of Cincinnati; Dr. Eames, of Ohio, proposed by Dr. Stockwell; Dr. N. K. Maniates, of Marshall, proposed by Dr. M. Gunn, of Detroit. The report was adopted.

The President read a communication from Dr. Stille, Chairman of the Committee appointed last year to consider the subject of extending the lectures of each chair in medical schools over a period of two years, stating that the views of medical institutions had as yet been imperfectly ascertained, and asking a continuance of the Committee. Granted.

Dr. Watson, of N. Y., moved that the Committee on Epidemics meet immediately after the adjournment. Agreed to.

The President read an invitation to the Association to attend the session of the American Association for the Advancement of Science, at Albany, in August next.—at which time, also, the Dudley Observatory will be inaugurated, and an address delivered by Hon. Edward Everett. The invitation was accepted.

The Association then adjourned to meet this morning at 9 o'clock.

SECOND DAY.

The Association was called to order by the President, at nine o'clock, A. M.

The minutes were read, corrected and approved.

Dr. Wister, of Pa., read the list of delegates who had registered their names since the last report.

The Secretary read communications from the following gentleman asking an extension of time in which to report upon the subjects named :

Dr. A. J. Semmes, of N. Y.,—"Coroners' Inquests."

Dr. J. Taylor Bradford, of Ky.,—"Treatment of Cholera."

Dr. J. M. Reese, of N. Y.,—"Infant Mortality."

Dr. E. R. Peaslee, of Me.,—"Inflammation, &c."

Dr. J. W. Corson, of N. Y.,—"The Causes of the Impulse of the Heart, and the Agencies which Influence it in Health and Disease."

Dr. Mark Stephenson, of N. Y.,—"The Treatment Best Adapted to each Variety of Cataract, with the Method of Operation, Place of Election, Time, Age, &c."

Dr. Beech, of Mich.,—"Medical Topography, and Epidemics."

Dr. J. C. Hutchinson, of N. Y.,—"The Anatomy and Histology of the Cervix Uteri."

Referred to Committee on Nominations.

The Secretary announced that he had received the following resolution adopted at the last meeting of the New York State Medical Society :

Resolved, That the members of the American Medical Association be invited to attend the semi-centennial celebration of this society, which will occur on the first Tuesday of February, 1857.

The invitation was accepted.

The Secretary read the following communication, dated April 7, 1856, from the Secretary of the Ohio State Medical Society :

SIR—At the annual meeting of this society, held in June last, at Zanesville, Ohio, the following resolutions were adopted, and I was directed to furnish you with a copy of the same :

Resolved, That the resolution offered by Dr. Grant, (a member of this society, but not at this or at that time a practitioner of medicine, but a lawyer,) at the last session of this society, viz: "That it is not derogatory to medical dignity, or inconsistent with medical honor, for medical gentlemen to take out a patent-right for surgical or mechanical instruments." was offered at a time when many members had left for their homes, and is not, therefore, the sense of the society.

Resolved, That the said resolution is in direct opposition to the code of medical ethics adopted by this society; and, therefore, be it further

Resolved, That said resolution, offered by Dr. Grant, and adopted by the society, be and is hereby rescinded.

The communication was ordered to be placed upon the minutes.

The Secretary read a communication from Dr. Hamilton, of Buffalo, N. Y., transmitting the second part of a report upon Deformities after Fracture and Dislocations, and asking for a correction of the minutes of last session in regard thereto. Dr. Hamilton also asked that he be permitted to incorporate, in a volume upon the subject he

is preparing for publication, that portion of the report already published by the Association.

On motion of Dr. Brodie, of Mich, the minutes were amended.

Dr. Atlee, of Pa., offered a resolution that the request of Dr. H., in regard to the publication of the report, be granted.

Dr. Lindsley, of Tenn., opposed the resolution. A similar request was denied at the session of the Association held at St. Louis.

Dr. Palmer, of Ill., moved to refer the matter to a special Committee. Carried.

The President appointed as such Committee, Drs. Palmer, of Ill., Atlee, of Pa., and Hills, of Ohio.

The following gentlemen were admitted as members, by invitation, of the Association: Drs. Edward Cox and S. B. French, of Battle Creek, Mich., introduced by Dr. Gunn; Dr. O'Donohue, of Battle Creek, introduced by Dr. Coates; Dr. S. A. Scott, of Woodstock, C. W., introduced by Dr. Stewart; Drs. E. R. Thornton, of Belleville, Mich., Holly, of Shiawassee, Mich., Foster, of Unadilla, Mich., and W. H. Stevens, of Mich., introduced by Dr. Denton; Dr. Thos. M. Franklin, of Lafayette, Ind., introduced by Dr. Rockwell.

Dr. Gunn, of Michigan, moved that those gentlemen from Canada, who are here by general invitation, be admitted in a body, and be requested to take seats on the platform during this morning's session. Carried.

The following gentlemen complied with the invitation:

Dr. E. M. Hodder, F. R. S. Eng., Prof. of Midwifery and Diseases of Children, Trinity College, Toronto.

Dr. J. H. Richardson, M. R. C. S. Eng., Examiner in Anatomy, University of Toronto.

Dr. Norman Bethune, M. R. C. S. Eng., Prof. of Anatomy, Trinity College, Toronto, C. W.

Dr. Worthy Haswell, M. R. C. S. Eng.

Dr. A. K. Dewson, College Physicians and Surgeons, New York, Licentiate of Province of the Canadas.

Dr. Geo. Coatsworth, Medical Department University of Buffalo, Licentiate of Province of the Canadas.

Dr. John Tarquand—Woodstock, C. W.

In receiving them upon the platform, the President, Dr. Pitcher, said he was happy to be the instrument of celebrating the nuptials, by which we effect a scientific re-union of the two members of the Anglo-Saxon race, which have so long been separated by the political

relations having their origin in the separation of the American colonies from the English crown.

Dr. Hodder, in behalf of his Canadian brethren, thanked the Association for the courtesy and kindness extended to them.

Dr. Sutton, of Ky., offered a resolution that 1,000 copies of the address of the late President, Dr. Wood, be published. Adopted.

On motion of Dr. J. B. Lindsley, of Tenn.,

Resolved, That a committee of three be appointed by the Chair, to prepare a suitable minute in reference to the death of our late Secretary, Dr. P. C. Gooch, of Richmond, Va., who fell a martyr while contending with the pestilence in Norfolk, in 1855.

The President appointed as such committee Drs. Lindsley, of Tenn., Thomson, of Del., and Mendenhall, of Ohio.

Dr. Gross, of Ky., from committee appointed the day previous, reported the following preamble and resolutions relative to the death of Dr. J. C. Warren, of Boston :

Whereas, It has pleased Almighty God to remove from the scene of his earthly labors our late fellow-member, Dr. John C. Warren, of Boston, formerly President of this Association, and for many years Professor of Anatomy and Surgery in Harvard University ;

And whereas, It is just and proper that, when a great and good man dies, his memory should be cherished by his fellow-citizens, and transmitted unimpaired to posterity for the encouragement of future ages ; therefore

Resolved, That this Association has learned with profound regret the news of an event which has deprived the American medical profession of one of its oldest, most useful, and most illustrious members—American surgery one of its greatest ornaments—science one of its best friends—and humanity one of its noblest benefactors.

Resolved, That the life of Dr. John C. Warren affords an example of a man who, notwithstanding the possession of ample riches, devoted himself, heart and soul, for upwards of half a century, to the cultivation and advancement of his profession, and to the good of human race.

Resolved, That this Association deeply sympathizes with the family of Dr. Warren in their bereavement, and that the Secretary be requested to transmit to them a copy of these proceedings.

The preamble and resolutions were adopted and referred to the Committee on Publication.

Dr. Gross, of Ky., read a report on "the causes which impede the progress of American Medical Literature." In conclusion, he submitted the following resolutions :

Resolved, That this Association earnestly and respectfully recommends : 1st. The universal adoption, whenever practicable, by our schools, of American works, as text-books for their pupils. 2d. The discontinuance of the practice of editing foreign writings. 3d. A more independent course of the medical periodical press towards foreign productions, and a more liberal one towards American ; and 4th. A better and more efficient employment of the facts which are continually furnished by our public institutions, for the elucidation of the nature of diseases and accidents, and, indirectly, for the formation of an original, a vigorous, and an independent national medical literature.

Resolved, That we venerate the writings of the great medical men, past and present, of our country, and that we consider them as an important element of our national medical literature.

Resolved, That we shall always hail with pleasure any useful or valuable work, emanating from the European press, and that we shall always extend to them a cordial welcome, as books of reference, to acquaint us with the progress of legitimate medicine abroad, and to enlighten us in regard to any new facts of which they may be the repositories.

Dr. Phelps, of New York, moved that the report and resolutions, as a whole, be adopted.

At the suggestion of a member, the question was divided. The report was adopted.

Upon the reading of the first resolution, a member proposed to substitute "just" for "liberal" in line 5, Dr. Gross accepted the amendment.

Dr. Palmer, of Ill., wished to understand the meaning of the word "practicable," as employed in the resolution, (line 2). If it meant that an inferior work by an American author was to be used in our medical schools, in preference to a superior one, treating of the same subject, by a foreign author, he was decidedly opposed to the resolution. If, when the American work is equal or superior to the foreign one, it is to be used, then he had no objection. He alluded to works by eminent English and French authors.

Dr. Gross explained. One of the works alluded to by Dr. Palmer must of necessity be used in our medical institutions of learning, as there is no work by an American author on the same subject. Foreign works should be used as books of reference, and American books, "when practicable," as text books.

Dr. Yandel, of Ky., moved that the resolutions be made the special order for Thursday morning. Lost.

Dr. Cobb, of N. Y., was opposed to the resolutions. If adopted and sent out to the world, they savor too much of know-nothingism to make them palatable. [Sensation.]

Dr. Leide, of Pa., was in favor of leaving to teachers of medicine the selection of their own text books.

Dr. Davis understood there was another report touching upon the subject—that upon "American Medical Literature," by Dr. Breckenridge, of Ky. He moved to lay the resolutions upon the table until that report was read. Carried.

The Secretary read a communication from Dr. P. A. Jewett, of Conn., Chairmann of the Committee to Procure Memoirs of the Eminent and Worthy Dead. Referred to Committee on Nominations.

Dr. Breckenridge, of Ky., read a report upon American Medical Literature.

On motion of Dr. Hooker, it was accepted and referred to the Committee on Publication.

The Association then adjourned till to-morrow morning at 9 o'clock.

THE EXCURSION.—The pleasure ride given in the afternoon, on board the steamer *Western World*, by the medical faculty of this city to their brethren attending the convention now in session here, was a very successful affair. About two hundred ladies and six hundred gentlemen participated in it, and all expressed themselves highly gratified.

The steamer left the dock at 4 o'clock, and, after proceeding some five or six miles into Lake St. Clair, rounded to, and again passed the city at a flying rate, towards Lake Erie, making the distance from abreast the Central Depot to Malden light in an hour and seven minutes, though carrying but twenty pounds of steam. The weather was such as to confine the company to the cabins of the boat, but the unremitting exertions of the Committee of arrangements and officers of the *Western World*, together with the excellent music of Lucker's cotillon band, rendered the confinement exceedingly pleasant. Dancing commenced shortly after leaving the city, and was continued without interruption until the return of the boat, at half-past nine o'clock.

A bountiful supper was prepared for the company in the after-cabin, in Mr. Wormer's best style.

Before separating for the night, a meeting of the members of the Association was organized on the boat, by the selection of Dr. N. B. Ives, of Connecticut, as Chairman, and Dr. N. B. Palmer, of Illinois, as Secretary.

On motion, Dr. Atlee, of Pennsylvania, Dr. Conwell, of Tennessee, and Dr. H. Monroe, of Maine, were appointed a Committee, who reported the following resolutions, which were unanimously adopted :

Resolved, That the thanks of the members of the American Medical Association be presented to the Michigan Central Railroad Company for their liberality in tendering to the Committee of Arrangements for our use, their magnificent floating palace, the steamboat *Western World*, for the excursion this afternoon and evening.

Resolved, That our thanks be presented to the Captain and officers of said boat for their polite attentions, and especially to Mr. Wormer and the Stewards, for the careful preparation and beautiful arrangement of the luxurious viands provided by the Committee for our entertainment.

Resolved, That the Secretary be instructed to send a copy of the above resolutions to the President of the Michigan Central Railroad Company, J. W. Brooks, Esq., R. N. Rice, Esq., Superintendent, and Chas. B. Swain, Esq., Agent.

THIRD DAY—MORNING SESSION.

The Association was called to order by the President at 9 o'clock. The minutes were read, corrected and approved.

A communication from Dr. Worth, of Md., relative to a report upon the Medical Topography of the eastern shore of Maryland, and one from Dr. Thomson, of Ky., relative to a report on "Chloroform," were referred to the Committee on Nominations.

The Secretary read a letter from E. S. Lesmoines, of St. Louis, enclosing an autograph letter from M. Dubois.

The Secretary read a communication from J. C. Holmes, Esq., the Secretary of the Michigan State Agricultural Society, presenting to the Association twenty five copies of the Transactions of the Society for 1853, and also the same number of the Transactions for 1854.

Dr. Brodie, of Mich., moved that the thanks of the Association be returned therefor, and that one copy be presented to each State represented. Carried.

On motion, Dr. McGugin, of Iowa, was appointed a member from that State, of the Committee on Nominations.

On motion of Dr. Atlee, of Pa.,

Resolved, That the President shall be authorized annually to appoint delegates to represent this Association, at the meetings of the British Association, the American Medical Society of Paris, and such other scientific bodies in Europe as may be affiliated with us. Adopted.

Dr. Gluck, of New York, offered the following :

Whereas, During the present year a medical congress is to be held in Europe ; therefore

Resolved, That the American Medical Association send to that congress four delegates, representing the four sections of the Union.

Dr. Davis, of Ill., thought it might be necessary and proper to send a greater number than four. He moved to lay the resolution on the table. Carried.

Dr. Clendenin offered the following :

Resolved, That a Committee of one be appointed, for a period of three years, with instructions to report progress at each annual meeting of this Society, to investigate the etiology and pathology of epidemic cholera, and that said Committee be allowed to add any other members to the same, which they think may be necessary to further the objects of the appointment.

On motion, referred to the Committee on Nominations.

On motion of Dr. Mendenhall, of Ohio,

Resolved, That the Secretary be instructed to strike the name of G. H. Cleveland from the list of permanent members of this Association.

On motion of Dr. Atlee, of Pa.,

Resolved, That the name of James R. McClintock be stricken from the list of permanent members.

These expelled members were accused by the movers of the resolutions of having retrograded into quackery.

On motion of Dr. Bissell, of New York,

Resolved, That this Association has learned with deep regret of the death of one of its members, Dr. Theodore Romeyn Beck, of Albany, N. Y., whose whole life has been devoted to the attainment and promotion of medicine and general science, and that we do hereby express our high appreciation of the excellencies of his character, distinguished by its simplicity, integrity, and firmness of purpose, and by the extent and variety of his acquirements in medical as well as in almost every department of science.

Resolved, That the above resolution be referred to the Committee to procure memorials of the eminent and worthy dead, and that they be requested to procure a memoir of the late Dr. Beck, to be published in the transactions of the Association.

Dr. Bloodgood, of Ill., offered the following :

Resolved, That the constitution of this Association be so amended as that hereafter the President shall be elected by ballot, and shall not be a resident of the State in which he is elected.

On motion of Dr. Watson, of N. Y., laid on the table.

Dr. Gunn, of Mich., reported the following members present by invitation: Dr. Ashley, of Ypsilanti, Mich., introduced by Dr. Brodie; Dr. H. F. Ewers, of Union, Mich., introduced by Dr. B. White, of Saginaw; Dr. Alex. Ewing, of Dexter, Mich., introduced by Dr. Denton; Dr. Reynall, of Dansville, N. Y., introduced by Dr. N. W. Ely; Dr. G. F. McCarthy, of Ind., introduced by Dr. Davis; Dr. M. H. Andrews, of Jonesville, Mich., introduced by Dr. Cone; Dr. J. R. Coates, of Kalamazoo, Mich., introduced by Dr. S. Barrett; Dr. W. H. Stebbins, of Saline, Mich., introduced by Dr. Denton; Dr. D. L. Briggs, of St. Joseph County, Mich., introduced by Dr. Robinson.

Dr. Wister, of Pa., offered the following, which was adopted :

Resolved, That the invitation to gentlemen of the medical profession of Canada, extended to them by the American Medical Association at its session in Philadelphia, be renewed for the meeting at Nashville, Tenn.; and that this Association may be safe from the introduction of unsuitable persons, it is recommended that gentlemen presenting themselves from the Province of Canada should be provided with a letter of introduction to this Association from one of the following gentlemen: Drs. Tarquand A. Scott, Woodstock, Canada; Drs. Hodder, Bethune, Richardson, Bonell, Haswell, Widmer, Beaumont, Herrick, of Toronto; Drs. O'Reilly, Craiggie, Duggan, of Hamilton; Dr. Sampson, of Kingston.

Dr. Phelps, of New York, offered the following :

Whereas, It has pleased an All Wise, but Inscrutable Providence, to visit the city of Norfolk, Va., and vicinity, with a desolating pestilence, equal, or surpassing, any recorded in ancient or modern times, and by which, in a few weeks, forty physicians, either residents or those from abroad, who had promptly rushed to the rescue, among the number of whom was our late Secretary and associate, Dr. Gooch, of Richmond—had been swept away; therefore,

Resolved, That such an instance of signal and unflinching devotion to the cause of science and of humanity demands at the hands of this national Association a passing expression of their high admiration of this, another memorable instance of the unparalleled sacrifices of the profession to the interests of the healing art and of the race.

Resolved, That this minute be incorporated in our transactions.

Adopted.

On motion of Dr. Palmer, of Ill., Rt. Rev. Samuel A. McCoskry, Episcopal Bishop of this diocese, was invited to a seat upon the platform.

The like courtesy was extended to Dr. Mussey, formerly President of the Association.

Dr. Stocker, of Pa., offered the following amendments to the constitution :

Amend article 3 so that it shall read : " Article 3. The regular meetings of the Association shall be held annually, and commence on the first Tuesday of May. The Association shall meet biennially in the city of ——. The place of meeting for the intermediate year shall be determined by a vote of the Assoc."

Amend article 4 by providing for one permanent and two assistant secretaries, and also specifying the duties, &c. of each.

Laid on the table, under the rule.

Dr. Dorsey, of Ohio, offered the following :

Resolved, That in May, 1858, and every third year thereafter, this Association meet at Washington City, and that the present officers be requested to correspond with the Board of Managers of the Smithsonian Institute, in regard to furnishing necessary rooms for the keeping of the archives of the Association.

Laid on the table, under the rule.

On motion of Dr. Sheets,

Resolved, That it is derogatory to the dignity of the medical profession to notice the works of irregular practitioners in our medical periodicals.

Dr. Frost, of S. C., objected to the introduction of resolutions. He thought it irregular. Reports were the order.

Dr. Davis, of Ill., moved that reports be made the special order. Carried.

Dr. Watson, of N. Y., moved to reconsider the last vote, in order to take up the resolutions attached to the report of Dr. Gross, of Ky., upon the " causes which retard American medical literature." Carried.

The resolutions were taken up. The question being upon their adoption.

Dr. Gross read extracts from his report, explained the intent of the resolutions, insisted upon their necessity, and advocated their adoption.

Dr. Davis, of Illinois, was opposed to adopting any report. There were now before the Association two reports, (the one by Dr. Gross of Ky., and one by Dr. Breckenridge, of Ky.) presenting directly adverse views. He thought both should be accepted and referred to the proper committee—nothing more.

Dr. Breckenridge, of Ky., said the point at issue is—whether the Association will favor the sectionalism or the universality of medicine. If Dr. Gross' report and resolutions are adopted, we decided in favor of the former.

Dr. Cobb, of N. Y., foresaw the difficulty that would arise in adopting Dr. Gross' report the day previous.

Dr. Watson, of N. Y., moved to reconsider the vote by which the report was adopted. Carried.

He then moved that the report be accepted. Carried.

On motion of Dr. Atlee, of Pa., the report and resolutions of Dr. Gross, and the report of Dr. Breckenridge, upon "American Medical Literature," were referred to the Committee on Publication.

Dr. Palmer, of Ill., from Special Committee to which was referred the communication of Dr. Hamilton, reported the following resolution, which was adopted:

Resolved, That leave be granted to Dr. F. H. Hamilton to make use of the materials of his report on "Deformities after Fractures," which is in course of publication by this Association, in his anticipated work upon "Fractures and Dislocations."

Dr. A. B. Palmer, Professor in the Michigan University, from the Committee on Plans of Organization for State and County Medical Societies, presented a lengthened and able report, containing numerous useful suggestions, with outlines for the proper organization of local societies, and a series of resolutions in accordance with the views enforced in the report. Accepted, and referred to the Committee on Publication.

On motion, the resolutions were temporarily laid on the table for further action by the Convention.

Dr. Davis, of Illinois, chairman of Special Committee, reported on "The Changes in the Composition and Properties of the Milk of the Human Female, Produced by Menstruation and Pregnancy," in a paper containing numerous valuable details of much interest to the profession and the public, obtained by careful examination and comparison, and showing conclusively the ill effects of lactation, especially during the latter of the periods referred to. Accepted, and referred to the Committee on Publication.

Dr. Chas. Q. Chandler, of Missouri, who was to report on "Malignant Periodic Fevers," submitted, as a substitute, through the Secretary, a paper on "Sulphate of Cinchona," which was received as a "voluntary contribution," and referred to a special committee.

Dr. Johnson, of Chicago, asked further time to report on "Excretions, &c." Referred to Committee on Nominations.

Dr. J. M. Newman, of Buffalo, from Committee on the Sanitary Police of Cities, presented an elaborate report, embracing details of the various estimated causes of disease in cities, as compared with rural localities, together with numerous valuable statistics of mortality

in the largest cities of Europe and the Union, of which the Doctor, at the request of the Association, gave a brief, verbal abstract. The report evidently embodies a vast mass of useful information, with deductions from it that city life is inimical to health and longevity, and arguments enforcing the urgent necessity for ameliorating the sanitary condition of the populous localities of cities and large towns. Of diseases arising from impure air and insufficient ventilation, classed under the term "zimotoic," the report stated that, in 1850, 40 per cent of all the deaths in the various cities were of that nature. The report also embodied details of the loss of life from cholera, small pox, &c., giving startling expositions of danger from these sources, and recommends the enactment of laws for compulsory ventilation and cleanliness, as well as for vaccination, &c. Accepted, and referred to Committee on Publication.

The President here requested such delegates as would prefer to take passage, on their return, on the Michigan Central Railroad Company's steamer *Western World*, for Buffalo, which leaves to-day at 12 M., to signify their wishes.

Adjourned to 2 o'clock P. M.

AFTERNOON SESSION.

The Association met at 2 o'clock.

Dr. A. J. Fuller, of Me., chairman of the Committee on the Best Treatment of Cholera Infantum, read a report thereon, in which he stated that the pathology of the disease was little understood, and that physicians should interchange views on the subject. The report was accepted and referred to the Committee on Publication.

Dr. Green, of N. Y., chairman of the Committee on the Use and Effects of Application of Nitrate of Silver to the Throat, read a report thereon. He asserted that great benefits had been derived from topical medication in thoracic diseases,—tuberculosis, bronchitis, &c. The report was accepted and referred to the Committee on Publication.

Dr. Flint, of Louisville, Chairman of the Committee on the Best Mode of Rendering the Medical Patronage of the National Government Tributary to the Honor and Improvement of the Profession read a report thereon. He denounced the granting of patents by the United States government to "quack medicines,"—stating, however, that it appears, from a letter written by the present Commissioner of Patents, that the practice of the Office has been to discourage such abuse of its functions, and that, during the past fifteen years, but

four or five such patents have been granted, although from twenty to thirty applications therefor have been made per year. The credit of sanitary improvements, Dr. Flint said, were not due to individuals, but to medical science. Such improvements are never discoveries or revelations, but inductions. The United States government should aid the great cause of medical science by making appropriations for the publication of the transactions of the National Association, and by paying prizes for the best essays on subjects selected by that Association. The report was accepted and referred to the Committee on Publication.

The Committee on Nominations made the following report :

The Nominating Committee beg leave to make the following report :

For Chairmen of Special Committees for 1857 :

Dr. E. R. Peaslee, of Brunswick, Me., on Inflammation, its Pathology and its Relation to the Recuperative Process.

Dr. J. C. Hutchinson, of Brooklyn, N. Y., and Charles E. Isaacs, of New York city, on the Anatomy and Histology of the Cervix Uteri.

Dr. J. Taylor Bradford, of Augusta, Ky., on the Treatment of Cholera.

Dr. Mark Stephenson, of N. Y., on the Treatment Best Adapted to Each Variety of Cataract, with the Method of Operation, Place of Election, Time, Age, &c.

Dr. J. W. Corson, of N. Y., on the Causes of the Impulse of the Heart, and the Agencies which Influence it in Health and Disease.

Dr. D. Meredith Reese, of N. Y., on the Causes of Infant Mortality in Large Cities, the Source of its Increase, and the Means for its Diminution.

Dr. J. Foster Jenkins, of Yonkers, N. Y., on Spontaneous Umbilical Hemorrhage of the Newly Born.

Dr. Henry Carpenter, of Lancaster, Pa., on the Use of Instruments in Obstetrical Practice.

Dr. Alex. J. Semmes, of Washington, D. C., on the Measures to be Adopted to Remedy the Evils Existing in the Present Mode of Holding Coroners' Inquest.

Dr. J. Marion Sims, of New York city, on the Treatment of the Results of Obstructed Labor.

Dr. J. B. Flint, of Louisville, Ky., on the True Position and Value of Operative Surgery as a Therapeutic Agent.

Dr. G. Volney Dorsey, of Piqua, Ohio, on the Causes and Cure of Indigestion, especially in relation to the Therapeutic Indications to be derived from the Chemical Composition of the Deposits in the Urine.

Dr. C. B. Coventry, of Utica, N. Y., on the Medical Jurisprudence of Insanity, and the Testimony of Skilled Witnesses in Courts of Justice.

Dr. Jos. Leidy, of Philadelphia, Pa., on Human, Animal, and Vegetable Parasities.

Dr. M. D. Darnall, of Bainbridge, Ind., on the value of a Strict Attention to Position in the Treatment of Diseases of the Abdomen.

Dr. George Sutton, of Aurora, Ind., on Milk Sickness.

Dr. Clark J. Pease, of Janesville, Wis., on the Blending and Conversion of the Types of Fever.

Dr. B. S. Woodsworth, of Fort Wayne, Ind., on the Best Substitute for Cinchona and its Preparations in the Treatment of Intermittent Fever and Malarious Neuralgia.

Dr. Franklin Hinkle, of Marietta, Pa., on the Use of Cinchona in Malarious Diseases.

Dr. Henry V. Campbell, of Augusta, Ga., on the Nervous System in Febrile Diseases.

Dr. John Neill, of Philadelphia, Penn., on the Laws, Governing the Deposit of Bone.

Dr. John W. Greene, of N. Y. city, on the Intimate Effects of Certain Toxicological Agents in the Animal Tissues and Fluids.

Dr. George Suckley, U. S. A., on the Medical Topography and Fauna of Washington Territory.

Dr. Jas. Cooper, of Hoboken, N. J., on the Flora of Washington and Oregon Territories.

Dr. Chas. E. Isaacs, of N. Y., on the Intimate Structure and the Pathology of the Kidney.

Dr. Israel Moses, of New York City, on the Diseases Incidental to Europeans from Temperate Climates in their Transition through Central America.

Dr. T. W. Gordon, of Georgetown, Brown County, O., on the Etiology and Pathology of Epidemic Cholera, to be continued three years, and with power to add any other members.

Dr. H. A. Johnson, of Chicago, on the Excretions as an Index to the Organic Changes going on in the System.

Dr. D. D. Thomson, of Louisville, on the Remedial Effects of Chloroform.

STANDING COMMITTEES.—*Committee on Publication*—Drs Francis G. Smith, of Pa., Chairman ; Caspar Wister, of Pa. ; Samuel L. Hollingsworth, of Pa. ; Samuel Lewis, of Pa. ; H. F. Askew, of Del. ; Wm. Brodie, of Mich. ; R. C. Foster, of Tenn.

Committee on Prize Essays—Drs. Wm. K. Bowling, of Tenn., Chairman ; E. B. Haskins, of Tenn. ; Thomas Lipscomb, of Tenn. ; A. H. Buchanan, of Tenn. ; B. W. Avent, of Tenn. ; W. A. Cheatham, of Tenn. ; Paul F. Eve, of Tenn.

Committee of Arrangements—Drs. C. K. Winston, of Tenn., Chairman ; Ira Conwell, of Tenn. ; William D. Haggart, of Tenn. ; J. L. C. Johnson, of Tenn. ; F. A. Ramsay, of Tenn. ; Geo. Grant, of Tenn. ; J. B. Lindsley, of Tenn.

To fill vacancies in the Committee on Medical Topography and Epidemics :

New Hampshire—Dr. V. P. Fitch, of Amherst.

California—Dr. Robert Murray, of Fort Miller.

To fill vacancies in the Committee upon a Uniform System of Registration of Marriages, Births and Deaths :

Vermont—Dr. Adrian T. Woodward, of Castleton.

Connecticut—Dr. Wm. B. Casey, of Middletown.

Virginia—Dr. R. W. Hazall, of Richmond.

California—Dr. Arthur R. Stout, of San Francisco.

They recommend the continuance of the " Committee to Procure Memorials of the Eminent and Worthy Dead," and that the report, as far as prepared, be referred to the Committee on Publication.

STANDING COMMITTEES.—*On Medical Education*—Drs E. Geddings, of S. C., Chairman ; C. W. Le Boutillier, of Minnesota ; G. F. Mitchell, of Ohio ; S. W. Clanton, of Ala. ; S. W. Butler, of N. J.

On Medical Literature—Drs. R. Hills, of Ohio, Chairman ; D. W. Yandell, of Ky. ; R. R. Porter, of Del. ; H. A. Johnson, of Ill. ; Charles E. Swan, of Maine.

The President stated that Dr. Anderson, of Ala., chairman of Committee on Medical Education, had sent in his report. It was accepted and referred to the Committee on Publication.

A report from Dr. Wroth, of Md., on the Medical Topography and Epidemics of the Eastern Shore of Maryland, was accepted and referred to the Committee on Publication.

A report from Dr. Cain, of S. C., on the Epidemic of Yellow Fever in Charleston in 1854, was accepted and referred to the Committee on Publication.

A report from Dr. Fenner, of La., on the Medical Topography and Epidemics of Louisiana, was accepted and referred to the Committee on Publication.

The Secretary, Dr. Brodie, stated that he had received a letter from Dr. Dillard, U. S. N., appointed on the Committee on Medical Topography and Epidemics, saying that he could not act, in consequence of having received no appointment as delegate to the Association from the Surgeon General.

Dr. Gunn, of Michigan, said three communications had been handed to the Committee of Arrangements by the Secretaries, which they (the Committee) had not time to examine. He asked that a special committee be appointed to report on volunteer communications.

Dr. Palmer, of Ill., offered the following, which was adopted:

Resolved, That the volunteer communications in the hands of the Committee of Arrangements be referred, with all other such communications, to a special committee to be appointed by the Chair, residing at the place of publication of the transactions; and if, in their judgment, the papers are worthy, they be referred by them to the Committee on Publication, to go into the transactions of the Association.

The President appointed as such committee, Drs. A. Stille, S. Jackson, and F. J. B. Biddle.

The authors and titles of the volunteer communications were announced by Secretary Brodie as follows:

By Dr. C. J. Chandler, of Rocheport, Mo., on Sulph. Cinchona in Periodic Diseases.

By Dr. Isidor Gluck, of New York, on Formation of Gun Shot Wounds, &c.

By Dr. G. P. Hachenberg, on an Improved Method of Applying Compression to the Scrotum.

A member of the Committee on a Uniform System of Registration of Marriages, Births and Deaths, stated that they were unable to make a report at present, in consequence of the death of their chairman, Dr. Wilson, of Conn.

The Committee on Medical Literature, for 1855, was continued for another year.

Dr. Neill, of Philadelphia, offered a resolution that no medical preparation, account of surgical operation, or anything else designed or calculated to give notoriety to an individual, be laid before the Association, until reported upon by a special committee.

Dr. Wood, of N. Y., presumed that this resolution was aimed at him. He had come here with the description of a disease never before described by surgeons—phosphorous disease of the jaw-bone. He had felt great delicacy in inviting the attention of the Association

to the subject, and it was not until after consultation with many of the most prominent members of the body, that he had permitted a friend to do so. As for the charge of seeking notoriety, he denied it *in toto*. He had aimed at no such purpose, and he felt wounded at the tone of the resolution.

Much applause followed the conclusion of Dr. Wood's remarks.

Dr. Neill disclaimed the intention of personal allusion in the resolution he had offered. That resolution embodied a principle which never should be violated. Dr. Wood's reputation, or notoriety, might not be enhanced by the action under reference, but the privilege of similarly proceeding might be abused by other persons hereafter.

Dr. Neill's remarks were received with applause.

Dr. Wood said he had heard beforehand that such a resolution was to be offered; and it was not the resolution itself that he cared so much about, as the outside talk. He expressed a desire that the motion of Dr. Gross, of Ky., inviting the Association to examine his (Dr. Wood's) surgical specimen, would be stricken from the minutes.

Dr. Thomson, of Del., made some humorous remarks. He hoped that New York would hold her jaw, and Philadelphia not stick in hers. He trusted that Dr. Neill would withdraw his resolution, and that Dr. Gross' motion would be stricken from the minutes. If these were done, he would see that all was made right between the opposing gentlemen before they reached home.

Dr. Gross moved to strike his motion referred to from the minutes, for the purpose, he said, of removing the bone of contention.

Dr. Neill withdrew his resolution, and Dr. Gross' motion was stricken from the minutes.

Dr. Gross, of Louisville, tendered, in behalf of the medical profession and the citizens of Louisville, an invitation to the Association to meet in that city in May 1858. Placed on file.

Dr. Dorsey, of Ohio, offered the following resolution, which was adopted:

Resolved, by the American Medical Association, That the Committee of the Etiology and Pathology of Cholera be instructed to memorialize the Congress of the United States, requesting that Honorable body to grant every necessary assistance which can or will promote the objects for which the Committee has been appointed.

The Secretary read a communication from the Royal Medical and Chirurgical Society of England, thanking the American Medical Association for their present of the eighth volume of their transactions. Ordered placed on file.

Dr. Wister, of Pa., offered the following which was adopted:

Resolved, That a committee of three be appointed by the President to correspond with the proper officer of the Smithsonian Institute, inquiring into the possibility of procuring a chamber in that institution for the uses of this Association.

The President appointed as such committee, Drs. Wister, of Pa., Hale, of Washington, and J. Neill, of Pa.

Dr. Phelps, of N. Y., offered the following, which were adopted :

Resolved, That the thanks of this Association are due, and are hereby tendered, to the Fire Department of the city of Detroit, for the use of their large and commodious hall, so amply furnishing to us accomodation for the convenient transaction of business.

Resolved, That the urbane deportment and elegant hospitalities of the profession and of private individuals, as well as the polite attentions of citizens generally, demand of this Association a high appreciation of the cultivated manners of this city of the West, and which has tended greatly to enhance the pleasure of the session here of the delegates from abroad.

The Association adjourned.

LAST DAY.

The Association was called to order by the President at 9 o'clock.

The minutes were read, corrected and approved.

Dr. Palmer, of Ill., moved that Dr. Coolidge, U. S. A., be substituted in the place of Dr. Finley, U. S. A., as a member of the Committee on Medical Topography and Epidemics. Dr. Palmer said he made the motion by request. Carried.

The following additional members (present by invitation) were reported: Dr. Sanders, of Monroe, Mich.; introduced by Dr. Rice; Dr. R. K. Rodgers, Suspension Bridge, N. Y., introduced by Dr. Brodie; Dr. Dwight, Aims, Calhoun county, Mich., introduced by Dr. Gunn.

Dr. Atlee, of Pa., offered the following, which was adopted :

Resolved, That all voluntary communications hereafter presented to the Association shall be referred to a Special Committee, to be appointed by the President on the first day of each annual meeting, whose duty it shall be to examine such communications and report upon the propriety of their presentation and reference to the Committee of Publication.

Dr. Lindsley, of Tenn., from the Special Committee appointed the day previous, reported the following preamble and resolutions :

Whereas, The exhibition of high courage and of self-sacrificing devotion to the good of others is ever honorable to a profession by whose members it is manifested, and worthy of their remembrance and emulation ; therefore,

Resolved, That in the death of P. Clairborne Gooch, of Richmond, Va., who nobly volunteered his services during the pestilence at Norfolk, we recognize a loss to this Association, the profession, and the country. His arduous and successful labors as Secretary of the meetings at Charleston and Richmond merited the regard of this Association. The zeal, ability and industry manifested by him as founder and editor of the *Stethoscope*—the first medical periodical established in the State of Virginia—showed his devotion to the cause of medical progress and activity, and the manner of his death gave signal evidence that he was one of whom his country might well be proud.

Resolved, That a copy of these resolutions be transmitted by the Secretary to the relatives of the late Dr. Gooch.

The resolutions were adopted, and had the usual reference.

On motion of Dr. Palmer, of Ill.,

Resolved, That the Committee on Registration have leave now to present a partial report, which is hereby referred to the Committee on Publication.

Dr. Denton, of Mich., offered the following :

Resolved, That a Committee of three shall be appointed, whose duty it shall be to enlist some enterprising publisher to aid in collecting and arranging material for an American Medical Directory.

On motion of Dr. Watson, of N. Y., laid on the table.

Dr. Leidy, of Pa., offered the following :

Whereas, It is the object of this Association, in the award of prizes for communications on subjects appertaining to medical science, to encourage the progress of the latter ; and as this result cannot be better attained than through original investigation and discovery—

Resolved, That hereafter an annual prize of — dollars be awarded for the best memoir or essay founded on original investigations of the author ; and in case of no memoir or essay being presented worthy of such award, the prize money to be appropriated towards the expense of publishing and illustrating such memoirs as may be subsequently deemed worthy of an award.

The resolutions, together with the suggestions of the Committee on Prize Essays, as to whether any means can be devised to cause an increase of the number of essays presented, were referred to a Special Committee, consisting of Drs. Leidy, Wood, and C. D. Meigs, of Pa.

Proposed amendments to the constitution being in order, Dr. Smith moved that the proposition to amend by providing that "any member who omits to pay for the published transactions for three successive years, shall be considered as withdrawn," be laid upon the table until the next annual meeting of the Association. Carried.

The Secretary read an invitation to the Association to attend the next annual meeting of the Massachusetts State Medical Association. Accepted.

Dr. R. K. Smith offered the following :

Resolved, That a special committee be appointed to report to the next meeting of the American Medical Association a classification of those diseases which involve a derangement of the mental manifestations.

Adopted, and Dr. Smith appointed chairman of said committee, with power to choose his associates.

On motion of Dr. Atlee,

Resolved, That the Committee on Publication be requested to transmit annually to the Epidemiological Society, of London, a copy of our transactions.

On motion of Dr. Gunn, of Mich.,

Resolved, That any new medical institution not heretofore represented in this body, be requested to transmit to the Secretary, with the credentials of its delegates, evidence of its existence, capacity and good standing.

Dr. Phelps, of N. Y., offered a preamble and resolutions relative to the relation existing between medicine and religion. Laid on the table.

Dr. McGugin offered the following:

Resolved, That a special committee be appointed to report on the subject of "Stomatitis Materna."

Adopted, and Dr. McGugin appointed chairman of such committee.

On motion of Dr. Bailey, of Ill., Dr. Davis, of Chicago, was requested to continue his observations on the changes produced in the composition and qualities of milk by pregnancy and menstruation; also the best substitute for the mother's milk when weaning becomes necessary; and report at the next meeting of the Association.

A report from the Committee on Railroads, &c., was read, and the same Committee continued to next meeting.

On motion of Dr. Smith, of N. J., the resolutions of Dr. Palmer, offered the day previous, were taken from the table and referred to the Committee on Publication.

On motion of Dr. Atlee, of Pa., the thanks of the Association were returned to those railroads that had evinced a liberality in conveying delegates to and from the Association.

On motion of Dr. Palmer, of Ill.,

Resolved, That the thanks of the Association be presented to the press of the city of Detroit, who have taken so much interest in reporting the proceedings of this meeting.

The Association then adjourned to meet in Nashville, Tenn., in 1857.

ACCOUCHEMENT OF THE EMPRESS OF THE FRENCH.—No authentic account of the parturition of the Empress of the French has yet been published. We gather generally that the labor was somewhat protracted, the infant much above the average size, and that the forceps had to be used. It is stated in the public journals that the Empress did not take chloroform, but we have reason to know that this is not correct. After suffering for a considerable period, she begged to have chloroform administered to her; but M. Dubois, having a strong objection to its employment, only consented to the inhalation of a small quantity. The result, however, was anything but beneficial, great excitement and some delirium ensuing. The chloroform was immediately discontinued, but it was some little time before its injurious effects had entirely subsided. As the labor did not progress satisfactorily, and as the expulsive pains were evidently insufficient to effect delivery, it was determined, after a consultation, to apply the long forceps. These were used with great dexterity by M. Dubois, with the happy result of completing the labor with safety to the mother and child. The application of the forceps was attended with the production of a bruise on the face of the infant, but the injury is not at all serious, and is gradually but sensibly diminishing. The "milk fever" supervening has been of the ordinary character of this affection in mothers not nursing their children, and has been productive of no alarm. Happily, all is now well with both the Imperial patients.—*London Lancet.*

EDITORIAL AND BOOK NOTICES.

BUFFALO MEDICAL JOURNAL AND NORTH-WESTERN MEDICAL JOURNAL.—In the *Buffalo Medical Journal* for April, the editor, after speaking of the controversy which existed last summer and fall between the *North-Western Medical Journal* and the *Peninsular*—or which in reality was rather between Rush Medical College through Prof. Davis of that School, and the Medical Department of the University of Michigan through one of our editorial corps connected with the University, says,—“Now the pleasant May is coming, the *Peninsular* is billing and cooing towards the *North-Western* like any turtle dove! What does it mean?” To this, the *North-Western*, in the May Number, responds: “Sure enough, what does it mean? My friend Hunt, it means simply that it is more in accordance with the tactics and sense of propriety of the *Peninsular* to commence playing the part of the dove, all at once, than to give its readers a manly and honorable reply to the *demand* made upon it in the December number of this journal.”

Though we had resolved to have nothing more to do with this matter in our journal, regarding it as both unprofitable and uninteresting to our readers, still, we think a brief explanation is now required.

Our readers will remember the attack which was made upon us more than a year ago in the *North-Western*, in consequence of a brief commendation of the Medical Department of our University, or an expression of our gratification that this institution was in advance, in certain specific reforms, of most of the other schools of the country, and they will also remember the articles in this journal repelling that attack and the others which followed. Those articles we intended to make strictly defensive; but in repelling the charges of “baseless pretensions,” of “arrogance” and “falsehood” which were made, and to justify our position and language, we were obliged to enter into details—to make comparisons between our school and others—and we thought it proper to show something of the position and relations of our accuser—and if we succeeded in proving ourselves innocent, as we think we did to the full satisfaction of all our readers, we could but show the impropriety, the untruthfulness of the accusations; and showing this, certain inferences were necessarily drawn as to the responsibility of the party making the charges.

Having, in the course of the discussion, passed over the whole ground in controversy—having repelled successfully every accusation

of sufficient consequence to justify the consumption of space, we brought our articles formally to a close.

After thus dismissing the subject in all the kindness of feeling induced by the declaration from our opponent that he used the expression "most glaring falsehood," as applied to us in the sense of "errors,"—in the December number of his journal he reiterated several of his charges, saying we had "conveyed false impressions by partial statements"—that we had "arrogantly assumed the position of censor and charged the faculty with delinquencies in the performance of their public duties"—that we had pursued an "illiberal course of conduct" in the use of "personalities," while he had steadily refused to reply to them—and then, with a coolness that would have been refreshing in dog-days, announced that he had "come to a point where forbearance ceased to be a virtue," and in language which smacked of the nursery or the school room, called upon us "to retract every one" of our expressions in which we accused him of charging us improperly, or place the proof of their correctness before our readers.

Notwithstanding the clearness and fullness of the illustrations which we all along presented of the truth of every thing we said, our very modest neighbor says, "We have a *right* to *demand* that he (we) place before his readers the proof or an explicit retraction."

When we first read this ridiculous demand, we really felt that if there was "a point beyond which forbearance ceased to be a virtue," *we*, indeed, had arrived at it, but being then prostrated upon a bed of sickness, which had given us more, perhaps, than our wonted appreciation of the precepts of the Great Master, after struggling awhile with the old retributive principle of "an eye for an eye, and a tooth for a tooth," if we did not positively "turn the other cheek," we at least passively complied with the injunction: "resist not evil," and remained silent. Choosing to remember, as we then did, and still do, our early relations to the editor of the *North-Western*, when, as young men, alike obscure and unknown, we occupied the same benches at old Fairfield, and again, after years of absence and change, we met in the city of New York, where, sheltered by the same roof, and engaged in similar pursuits, we renewed an acquaintance which had nearly faded away, and established an intimacy which even this paper war of words, we hope, will not destroy. Choosing to cherish the memory of all this, and the many good qualities both of head and heart which he unquestionably possesses, notwithstanding the extravagancies of views, feelings and conduct

into which his great excitability it seems sometimes leads him, we should still have remained silent, giving him both the first and the last word, had not the remarks of the *Buffalo Journal* and his response called for a notice.

The article to which reference is made both by the *Buffalo* and *North-Western*, as contained in our March number, was written by one of our confreres who supposed, as we all hoped, that this contest was ended, and was intended doubtless to facilitate the establishment of such relations as would enable our respective journals to fulfil each its mission in peace and quietness.

Now, with regard to this reiterated *demand* for retraction or proof, we have this to say—that, according to our understanding and judgment, the truth will not only not allow us to retract “every one” of those charges of unfair and unjust accusations, &c., but it will not allow us to retract *a single one of them*. We do not speak of our neighbor’s motives—we cannot penetrate to them. We speak only of his accusations against us, and declare them unfounded. We have already showed such to be the case.

As to proving them so, we repeat that we have already done it, and we have yet to learn that there is a single individual who has read our articles and is not directly interested in the matter, who is not fully satisfied with the proof. That the editor of the *North-Western* himself is not satisfied, is quite likely. We doubt whether he would be if the demonstration were fifty times repeated. As he seems inclined to old maxims, we refer him to the following very homely but true one:

“Convince a man against his will,
He’s of the same opinion still.”

So far as *our* readers are concerned, we are quite sure that it is unnecessary to do more than refer them to the articles already written, and although it would not be a difficult task to bring together the accusations that have been made against us, and repeat the proofs of their possessing the characteristics we have attributed to them; still, to do the subject justice—to present the whole in a connected form—would require much space which can better be appropriated to other purposes. We think it would be unjust to our subscribers to require them to pay their money for a rehash of this already stale material. If the editor of the *North-Western* thinks it important to continue the discussion, we will accommodate him by doing so in a separate pamphlet form, preceding its continuance by the publication of what has already been written on both sides, each

party to the contest sharing equally in the expense; or, if he thinks his readers have not had enough of it, the discussion may be continued in his journal. We are ready for it there. Of the result of such discussion upon the minds of those who shall look at both sides, we have no misgivings. In the language of an eminent Medical gentleman, in a distant State, who has written us on this subject, we believe "that, trusting in the purity of our motives and the justness of our cause, we can well afford to submit the case to the judgment of the profession."


THE CLOSE OF THE VOLUME.—The present number will close the third volume of the *Peninsular Journal of Medicine and the Collateral Sciences*. Of the manner in which it has so far performed its functions, its readers will judge. The past must speak for itself.

For the future we have to say that our motto is, *onward*. Although of the usual size of medical monthlies, and printed with type which enables us to present more matter than several of our contemporaries, we have all along been restricted in room for selections; and notwithstanding our list of promptly paying subscribers will scarcely justify increased expense, our desire for improvement is such that we have determined to add *eight* pages more to our former size, without increasing the price of the Journal. In view of this *advancement* on our part, we ask our subscribers to manifest an equal disposition to *advance* on theirs, and send in their subscriptions for the next volume according to our terms. To those in arrears we would intimate that we must have what is due us to save us from positive pecuniary loss. We are confident that to all right minded men this intimation must be as effectual as the most stirring appeal.

A word to Authors and Publishers. Notices of books received have not always hitherto appeared in our Journal as promptly as we could have desired. This has happened in consequence of the illness of one of the editors, and from other causes which it is unnecessary to specify, but which, we hope, will not again occur. Hereafter all books received will be noticed in some way in the next issue of the Journal after their reception. If there shall not have been time to read a work thoroughly, and to have formed an opinion of its merits, its appearance will be noticed and some brief account given of its objects, and the claims of its author to attention; and in that case, after the work is read, an opinion will be stated with such extracts or illustrations as may seem to be required. We do not intend that these opinions shall be of the stereotyped order. Justice to our

readers as well as to those works which are really meritorious, and above all, truth and honor, will not allow us to use indiscriminate praise or censure; and as our Journal is read by a large class of medical students and young physicians, about to purchase libraries, who have need of advice respecting their selections, we will be glad of the favors of Authors and Publishers *on the terms above stated*.

Grateful to Correspondents for favors, we solicit their continuance, and to paying subscribers, while acknowledging their kindness, we would say we shall use our best exertions to render an equivalent for the money received.

 By reason of the large amount of space required for the publication of the proceedings of the American Medical Association, which, we have believed, our readers would prefer to have entire rather than by installments in two or three numbers, and by the large number of book notices, selections have been entirely crowded out of this number. We have also added several pages to this number, in order to include the whole of the proceedings and bibliographic notices. For the same reason we have been necessitated to defer publishing a number of communications, some of which were excluded from the last number by the proceedings of the State Medical Society, but which shall appear in the next, commencing a new volume, which will be enlarged by about one hundred pages.

We shall send to each of our subscribers with this number a copy of Chancellor Tappan's Address to the Graduating Class of the Medical Department of the University of Michigan. It will well repay perusing, and, if circulated amongst non-medical readers, may perhaps not only interest but enlighten their understanding on the subjects of charlatanism and empiricism.

HUMPHREYS R. STORER, PROFESSOR OF MIDWIFERY IN THE M. M. COLLEGE, BOSTON.—It is so rarely that one sees admitted into the columns of the *National Intelligencer*, even in the way of advertisement, any thing disorganizing or pernicious in its tendencies, that my attention was specially arrested by the appearance of a card in that venerable journal, giving notice to the inhabitants of Washington, of the arrival in that city of a German Homœopathist, by the name of Perdbeau, recently from Boston. But the surprise naturally excited by the insertion of the notice in an organ uniformly so conservative, was soon merged in a feeling of disgust on learning by its perusal that this Teutonic Quack was permitted to refer to Humphreys R.

Storer, of Boston. We say permitted, for we can hardly conceive that even Homœopathic impudence, famous everywhere for its unblenching effrontery, would dare perpetrate such an act of audacity as to refer, without his consent, to a gentleman whose name was to be used, and the influence of whose public professional position was to be invoked in aid of the designs of the imposter.

This statement is made as a reason for instituting the inquiry, what relation this Dr. Storer bears to the medical profession in Boston? And whether it is possible that one of this name affiliated to our friend H. R. Storer, M. D., can have so far forgotten the respect due his natural and professional allegiance as to allow his name to be merged in the advertisement of a mountebank?

Boston can answer for itself, but for us, who live in the neighborhood of the granaries of the West, we have learned to separate the wheat from the tares, and have also learned one other thing from the customs of rural life, that of keeping a partition wall between the wolves and the flocks.

MANUAL OF CHEMICAL PHYSIOLOGY. From the German of Prof. C. G. LEHMAN, M. D. Translated, with notes and additions, by J. CHESTON MORRIS, M. D., with an introductory essay on Vital Force, by SAMUEL JACKSON, M. D., *Professor of Institutes of Medicine in the University of Pennsylvania, &c.* Published by Messrs. BLANCHARD & LEA, Philadelphia.

This book, if read in connection with the Pathological Anatomy of Carl Rokitansky and the large and illustrated work of Prof. Lehman on Physiological Chemistry, all recently published by Messrs. Blanchard & Lea, will furnish the student an abundant resource for the acquisition of all he can well learn on the subject of morbid structure and Zoochemistry, both in its healthy and morbid relations.

The manual of Prof. Lehman, as rendered into classical English by Dr. Morris, and prefaced by the essay of Prof. Jackson, on the Physiological, Pathological and Therapeutic relations of the human organism, is one of the most valuable contributions to the science of medicine which has been made since the advent of Liebig.

In the opinions expressed by Prof. Lehman on the organic movements, we perceive the effects of an exclusive application of the mind to the consideration of matter in its physical relations, which are made manifest in the expression of a belief, that we are not at liberty to assume the existence of a vital force for the explanation of vital processes, as the idea of such a force is based upon nothing less than upon reason.

The introductory essay of Prof. Jackson, in whose mind there seems to be an evident fondness for metaphysical studies, has apparently been written with a view to arrest the proclivity towards materialism, which the study of Lehman, if not checked by such a discussion, might give to the minds of his pupils. The contemplative mind will form its own opinions on all subjects of this nature, irrespective of the influence of others, and the less speculative and less thoughtful will have received sufficient notice of the nature of the ground they are to travel over.

We have read this volume with great interest and much profit, intending to make an epitome of its contents for the benefit of our readers, but finding that it is itself but an abridgment, which can not easily be further condensed, we are compelled to relinquish that design and terminate this notice by expressing the wish that every student and practitioner in the Peninsular State could be the owner of a copy of Lehman's *Chemical Physiology*, which may be obtained of Messrs. Raymond & Selleck in this city.

THIRTEENTH ANNUAL REPORT OF THE MANAGERS OF THE STATE LUNATIC ASYLUM AT UTICA, N. Y.—We are induced to notice this document, not so much from its own magnitude, as from the intrinsic importance of the subject and the manifestation by the managers, of such an intelligent appreciation of their responsibilities, and the sterling good sense they have exhibited in the manner of discharging their duties, not only to the State, but to the subjects of its beneficence. Although evidently impressed with the necessity of a due observance of economy in the administration of public trusts, they seem not to have been unduly restrained in the expression of opinions or the adoption of measures, by a pusillanimous dread of an incorrect public opinion, but have sought, at the same time, both the means of fulfilling with fidelity their duties to an afflicted class and the opportunity of enlightening the popular mind, so as prospectively to render their labors less onerous, and the situation of the insane less afflictive to themselves and less painful to their friends.

In the extent of grounds appropriated to this use, in the style and extent of buildings occupied, in the method of warming and ventilating them, in the means adopted for affording healthful employment to the inmates, we consider the Utica system for the insane a model institution of its kind.

The report of the Superintending Physician is brief, but exhibits clearly the interior condition of the establishment, shows the daily

average under treatment, the percentage of recoveries, the ratio of mortality, the number of admissions, and the number refused admission for the want of capacity in the building to receive them.

In a document like this, addressed as it is, to a legislative body, it is best, perhaps, that all theoretical discussions on the nature and seat of mental alienation should be omitted, as the public, and especially the legislative public, are not peculiarly qualified to appreciate the reasons for adopting one in preference to another view of the pathology of insanity, or for the application of moral, rather than medical instrumentalities in the treatment of it.

Dr. Gray, the able Superintendent, has urged with much force and great propriety, the importance of an early removal of the insane from the scenes which have given origin to their mental disorders, and the substitution instead, of the restraints and influences of an insane retreat.

The report, as a whole, shows that the Utica Asylum is possessed of a vigorous vitality, which we hope may long endure and successfully fulfill its mission of beneficence.

In the midst of such fearful acquisitions to the ranks of insanity, as we daily witness, it is a matter of painful, but we hope not of continued futile regret, that our own legislature has not already acted upon the judicious suggestions of the Trustees of the Michigan Asylum, and placed the required amount of funds at their disposal, to enable them economically and without compulsory delay to complete the necessary buildings and improve the grounds.

PHYSICAL EXPLORATION AND DIAGNOSIS OF DISEASES AFFECTING THE RESPIRATORY ORGANS. By AUSTIN FLINT, M. D., Professor, &c. Philadelphia, BLANCHARD & LEA. pp. 636.

From the time auscultation was brought to the notice of the profession by Lænnec as a mean of arriving at a more accurate diagnosis of thoracic disease to the present day, it has been steadily advancing in the confidence of the enlightened and scientific physician. Resting, for the rationale of its developments, upon the basis of an exact science, it cannot mislead as to the mechanical arrangement of the organs emitting the various characters of the sounds it proposes to examine. The pathological conditions corresponding to these mechanical modifications of the sound generating cavities, of course can only be determined by careful comparisons of the recorded sounds with the results of autopsic examinations. This is a thing that cannot be done in a day. For forty years, the patient efforts of many

among the most distinguished of our profession have been devoted to this end, and with a success that has completely established auscultation as a recognized and indispensable assistant to the accomplished practitioner.

We consider the work before us as a valuable contribution to Auscultatory Medicine. It is plainly the result of careful, patient and well-directed labor, and will be found not only a complete instructor in the art of which it treats, to the intelligent student, but also a valuable work of reference for the experienced physician. The candid estimate of the true value and place of the physical signs among the elements of a correct diagnosis cannot fail to strike the attention of the reader. No one will be led to suppose that physical exploration is to supersede or render unnecessary a patient examination into the rational symptoms of a disease, from the teachings of Dr. Flint. Auscultation was never intended for a labor-saving machine; but as a means of extending the field of accurate, and correcting the errors of physical diagnosis, it is invaluable.

The arrangement of the different subjects, adopted by Dr. Flint, is remarkably judicious, and his plan of recapitulation of signs treated of in the text, in our opinion adds value to the work.

We have been particularly pleased with the remarks of the author upon the relative value of Mediate and Immediate Auscultation, and upon the different forms of the Stethoscope. Perhaps from early habit and prejudice, we cannot but give the preference to the Stethoscope in all cases. We know that the ear applied directly to the chest, will recognize an abnormal sound; but we do not know that that sound, when recognized, can be located. If it cannot, in many instances, one half of the value of the physical exploration is lost. Speaking of the difficulties, or appreciating the differential characters of bronchial and cavernous respiration, the author remarks: "But a bronchial respiration, at the summit of the chest, is not unfrequently circumscribed within narrow limits; hence errors of diagnosis are necessarily incident to reliance on this point. * * * I have known mistakes arising from this source to be committed by experienced auscultators. Taken, however, in connection with other points, it is of considerable importance; and in order better to circumscribe the area whence sounds are received by the ear, the Stethoscope should be used in preference to immediate auscultation." Now, this is but one among the numerous instances where we consider the Stethoscope indispensable. But it is so much easier to use the ear than the Stethoscope that one is apt to be seduced into a neglect of the old

fashioned instrument, both by the force of indolence and fashion. We would therefore earnestly recommend the young auscultator always to use the Stethoscope until he is sure he has command of it. If he *then* prefers the ear, he has a right to his preference.

REPORT OF THE TRUSTEES OF THE STATE IDIOT ASYLUM AT SYRACUSE, N. Y. Transmitted to the Legislature, February 11, 1856.

This document, for which we are indebted to our friend, Dr. F. F. Backus, of Rochester, one of the Trustees, is chiefly devoted to the business details of the institution. Enough, however, is to be learned from it, to show how successfully science and philanthropy have co-operated in achieving the moral and mental elevation of a class of human beings, hitherto deemed incapable of intellectual advancement. The illustrations furnished by the successful culture of the physical and mental powers of some of the inmates of the Asylum, of the mutual relation of mind and matter, as found to exist in the constitution of man, must become an interesting subject of study to the student of psychology, and compensate him in some degree for the labor bestowed upon a soil, which, at the outset, promised such barren results.

This, we think, must be one of the rewards, the hope of which sustains the Superintendent, Dr. H. B. Wilbur, in the discharge of his duties.

Judging from the tributes of respect paid the memory of the late John C. Spencer, one of the Trustees of this Asylum, by his survivors, we should think that those qualities of mind which distinguished him as a lawyer, were successfully engaged in this new pursuit, commenced so near the close of an active life.

The late census shows that there were at the time it was taken, in the State of New York, 296 idiots under fourteen years of age. These figures show also the necessity, no less strikingly than other facts do, the utility of such an Asylum.

AN INTRODUCTION TO PRACTICAL PHARMACY. Designed as a *Text-Book* for the *Student*, and as a guide to the *Physician* and *Pharmaceutist*. With many formulas and prescriptions. By EDWARD PARRISH, *Graduate in Pharmacy, Member of the Philadelphia College of Pharmacy, &c., &c.* With 243 illustrations. Philadelphia: BLANCHARD & LEA, 1856.

The title page of this work sufficiently points out its object.

The author has divided it into five parts, viz:

Part 1st. Preliminary, in which are grouped several chapters among which metrology, including weights and measures and specific gravity, hold a prominent place.

Part 2d treats of the mode of preparing the various classes of permanent vegetable preparations, with their strength, doses and medical properties.

Part 3d is devoted to the classification of plants, with the chemical composition of the leading articles of the *Materia Medica*.

Part 4 treats in a similar manner of the inorganic medicines.

Part 5 gives practical directions for prescribing, selecting, combining and dispensing of medicines, illustrated by numerous formulas, both in Latin and English.

A copious index closes the work.

To practitioners in the country who are necessitated to dispense their own medicines, the book is of especial merit. To those, and also to druggists, we can safely recommend it.

For sale in this city by Raymond & Selleck.

ON BANDAGING AND OTHER OPERATIONS OF MINOR SURGERY. BY F. W. SARGENT, M. D., *Member of the College of Physicians of Philadelphia, one of the Surgeons to Will's Hospital, &c., &c.* New Edition, revised and enlarged, with one hundred and eighty-one illustrations. Philadelphia: BLANCHARD & LEA, 1856.

This work has now reached its second edition, which makes its appearance revised and enlarged, and improved in its mechanical execution. This, of itself, is indicative of its well merited popularity, which the improvements in this edition must greatly extend. Laying claim to no originality, except, perhaps, in its composition, yet, we think, the author has supplied a work original in its design, and as valuable as many works of more originality in substance. He has furnished directions and illustrations for the execution of all those minor operations of every day application in the practice of surgeon and physician, which are so cursorily noticed, or altogether omitted in the more *complete* treatises on surgery, that the young practitioner, except he has had the benefit of a larger amount of clinical teaching than is enjoyed by most students, in his first cases finds his ideas on some of those matters rather vague and unreliable. This disadvantage will be entirely remedied by this work. The illustrations are well executed, and render the directions perfectly intelligible to the youngest student. It is an excellent manual for the student and young practitioner to whom it is addressed.

ON THE ORGANIC DISEASES AND FUNCTIONAL DISORDERS OF THE STOMACH. BY GEORGE BUDD, M. D., F. R. S. SAMUEL S. & W. WOOD, 261 Pearl st., N. Y., 1856. For sale by RAYMOND & SELLECK, Detroit.

The larger portion of the contents of the above work have been presented to the Medical Public through the Medical Journals some time since. It is now republished, in an united form, with such additions and corrections, as his subsequent experience has suggested. Those who have read his work "On Diseases of the Liver," will have no hesitancy in procuring his more late and equally acceptable views "On the Organic Diseases and Functional Disorders of the Stomach," especially so, when next to the brain, this is the most important organ in the human system.

HEADACHES, THEIR CAUSES AND CURE. BY HENRY G. WRIGHT, M. D., M. R. C. S. L., *Fellow Roy. Med. Chirurg. Soc., &c.* New York: SAMUEL S. & W. WOOD, 1856. For sale in Detroit by RAYMOND & SELLECK.

This little work is divided into two parts, viz: Headaches, their varieties and symptoms, and Headaches, their causes and treatment. The subject is taken up in a systematic order, and with a good deal of ability. Any author who can throw light on the Pathology of this "Common Affliction," deserves the thanks of the Profession. It should be read by every Practitioner of Medicine.

A MANUAL OF THE PRACTICE OF MEDICINE. BY GEORGE HILARIO BARLOW, M. A. and M. D. Cantab., &c., &c., with additions by D. FRANCIS CONDIE, M. D., *Fellow of the College of Physicians, &c.* Published by MESSRS. BLANCHARD & LEA, Philadelphia, 1855. For sale by RAYMOND & SELLECK, Detroit.

As a general rule, it would be safe to commend to our professional readers any and all works on the subject of medicine which these intelligent publishers might choose to print, whether the productions of American talent, or the reprint of foreign books with notes by native editors.

This book, we think, is one of the exceptions, both because it seems not to be destined to fill a special hiatus in medical literature, and also, because it has not merit enough of itself to displace any of the standard authors on Practical Medicine now in the hands of physicians, or on the shelves of the booksellers. Neither do we think that its value has been greatly increased by the labors of the American

editor whose chapter on Cerebro-Spinal Meningitis has so much the appearance to us of having been written by a person not himself familiar with the subject, that it is, in our humble opinion, a decided failure. The introduction of the word "nervine" as an adjective into the body of the work, where it is often repeated, is decidedly offensive to American ears, where it has been applied chiefly by irregulars to other uses.

As the book is not without positive merits, the size of it may make it an object with many to purchase a copy who cannot well afford to buy the Dictionary of Copland, the Library of Tweedie, the Lectures of Watson, or the Practice of Wood, or Dunglison, or Eberlee, or the smaller, but excellent work of Dickson. To such we commend it.

We regret the necessity for these remarks, but feel assured the Messrs. Blanchard & Lea are too enlightened and too liberal to ask or expect us to utter ought but our real sentiments in relation to any work submitted to our examination. Our duty to our readers, and we think to them also, requires this of us. If our opinions are to have any value attached to them, we think it should be established, that they are not stereotyped, but in each case are the results of an intelligent conviction, into which no personal considerations should be allowed to enter.

ELEMENTS OF NATURAL PHILOSOPHY. Copiously illustrated by familiar experiments, and containing descriptions of Instruments and directions for their use, designed for the use of *Schools* and *Academies*, by A. W. SPRAGUE, A. M., with 280 engravings.

COLUMBA. By PROSPER NERIMEE. Translated from the French.

BERENICE. BOSTON: PHILLIPS, SAMPSON & COMPANY, 1856. For sale by JOHN A. KERR, Detroit.

The above work on the subject of Natural Philosophy, although written expressly for the use of schools and academies, will not come amiss in the hands of those of riper years. The one great thing to recommend it in this respect, is the description given of instruments and the directions for using them. At the same time, the instruments are shown by plates, and are of the most modern improvements.

In reference to its value for the younger student, we have no hesitancy in recommending it. Notwithstanding, it has one feature that does not meet our approbation, viz that of having the questions printed. The student (from our own experience) satisfies himself by seeking an answer to them, instead, of investigating and inform-

ing his mind of the relations one part of the science has to another. It also has a tendency to make the teacher indolent, as it saves him the necessity of examining the subject before hand. But our space will not permit of further notice. The book is a good one.

The other books which head this notice, belong to a class of literature, which, if they do not positively instruct, at the same time serve to relieve the mind when fatigued by other and more exhausting labor. And as the moral they inculcate and the subjects which make up their pages, do not infringe upon the morals and good sense of the most fastidious, we can see no harm in their being found upon the table of any parlor.

A PRACTICAL TREATISE ON THE DISEASES OF THE TESTIS AND OF THE SPERMATIC CORD AND SCROTUM, with numerous wood engravings. By T. B. CURLING, F. R. S., &c., &c. Second American, from the second revised and enlarged English edition. Philadelphia: BLANCHARD & LEA, 1856. For sale by RAYMOND & SELLECK, Detroit.

This is one of the few American editions of English works that have reached us, minus the name of the American Editor on its title page. In this, we think, the publishers have done well.

It is now twelve years since the first edition of this work was issued, and since that time, the author has continued his enquiries, and availed himself of increased opportunities of studying the subject of the text. Consequently some new chapters have been added, and others have been re-written or altered.

This new American edition is beautifully printed, and has passed through the Press under the supervision of Dr. W. H. Gobrech, who has not only restored the anatomical introduction omitted in the London edition for the want of room, but has added numerous woodcuts and otherwise improved this over the last London edition.

We cannot too highly recommend this monograph to the attention of the profession as one of the most complete works on the subjects.

ATLAS OF CUTANEOUS DISEASES. By J. MOORE NELIGAN, M. D. Edin., M. R. I. A., &c., &c., &c. Philadelphia, BLANCHARD & LEA, 1856. For sale by RAYMOND & SELLECK, Detroit.

The arrangement adopted in this Atlas, is made to conform to the authors *Treatise on Diseases of the Skin*. "The letter press given with the plates, consists simply of a short description of each figure, with a reference for an account of the disease to the chapter and page

of the book in which it is described." The work contains 96 illustrations, and is gotten up in the usual neat and tasty style of the American publishers.

In reference to the merits of the plates themselves, as a portraiture of the respective diseases, we think it falls short of those of Erasmus Wilson. Whether the error lies in the coloring, or in the class of patients from which they were taken, we are unable to know; certain it is to our view that the plates of Wilson are more life-like than those of Neligan. Each have, however, their merits, and Neligan's Atlas cannot fail of being found an able guide in the diagnosis of *Cutaneous Diseases*.

THE LOUISVILLE REVIEW.—We have received the first number of this Bi-Monthly Journal of Practical Medicine and Surgery, to the proprietors of which we wish a deserved and remunerating success.

Its publication must be regarded as an experiment by those who have undertaken the enterprise; but if it receives the aid of half the talent included in its list of collaborators, it can only fail of success for the want of a just appreciation of the merits and objects of a review on the part of the members of the profession occupying the territory constituting the States of the Northwest. We invoke for it the aid and patronage of those to whom it especially addresses itself.

The contents of the present number, the well known reputation of its senior editor for talents, acquirement and assiduity, constitute a guarantee that the contract implied on the part of the conductors will be faithfully performed, if the patronage secured is at all adequate to its support. It is edited by Prof. S. D. Gross and T. G. Richardson, M. D., both of the University of Louisville, Ky.

MONOGRAPHS RECEIVED:—CORSON on the Effects of Lead on the Heart, a pamphlet of twenty-four pages, with the History of ten cases. Re-printed from N. Y. *Journal of Medicine*.

Remarks on Vesico-Vaginal Fistule, with an account of a new mode of suture and seven successful operations, by N. Bozeman, M. D., of Montgomery, Ala. Re-print from *Louisville Review*.

ABORTION.—M. Scavzoni proposes and supports his proposition by cited cases, to produce abortion by exciting the mammary glands by means of an apparatus acting on the principle of cubs.—*Gaz. Med.*

MISCELLANEOUS.

GLEANINGS FROM OUR APRIL EXCHANGES.—An examination of their pages exhibits a large amount of interesting and much valuable matter in our exchanges, and many papers which we wish we might transfer entire to our own pages, but this being impracticable, we may preserve something of the flavor, with a little of the substance by a brief synopsis. Looking over the pages of our nearest neighbor, the *North-Western Med. and Surg. Journal*, our eye lights upon a paper upon that omni-present subject, upon which more ink has been shed within the past two years than upon any other, except it be Cholera, viz: Yellow Fever, its Pathology and Treatment, by Theod. Walser, M. D., Assistant Surgeon to Marine Hospital, N. Y. The author of this paper says that careful and dilligent observation leads him to believe that whatever success was had in the treatment was owing to the use of Quinine after the stadium invasionis and the operation of the Cathartic (Calomel or Castor oil). He also accounts for the beneficial use of Tinct. Ferri Chloridi, once so much in vague during the epidemic in Savannah, in 1854, to the similarity of Yellow Fever in its ultimate effects to Purpura Hemorrhagica (Perhaps, Dr. Knapp may see in this also incontestible evidence of its identity with Scurvy.)

The next article in the same Journal is from the pen of Prof. Freer, "*On the Effects of Dislocations, Sprains and Fractures into or near the Elbow Joint.*" In regard to which, he announces the following conclusions fortified by a collation of a mass of authorities and arguments:

1. "Stiffness of the joints from injuries should be treated and may be remedied, by forced movements of the kind natural to the joint. They should be first used while the patient is under the influence of ether, and repeated as occasion may require."

2. "Some imperfection of the movements, deformity of the joint, wasting of the muscles and paralysis of the nerves, often remains after injuries of the elbow joint, as the inevitable consequence of the injury."

In the *Western Lancet*, Dr. G. A. Kunkler reports a case of "*Chronic Internal Hydrocephalus, treated by paracentesis.*" The operation was performed twice with benefit, the second four weeks after the first operation. The child improved rapidly after the second one, and was not seen again until five months afterwards, when it had become as bad as ever, and the operation was performed

a third time, evacuating eleven ounces of fluid. The patient, however, sank and died in five days. A fraction over thirty-three ounces were taken away in the three operations.

In the same Journal, Dr. O. C. Gibbs reports a case of *Carcinoma of the Stomach*, in which the patient continued to live for nineteen days after all nourishment was suspended, although the food reduced to the minimum quantity, had invariably been vomited soon after ingestion, for some time previous, to its total discontinuance. What was also remarkable, was the abundance of adipose tissue remaining after such prolonged abstinence from food. The author remarks: "It would be interesting to know whether wasting of the adipose tissue was, as is supposed, a common symptom in Carcinoma of the Stomach." He cites the case of Napoleon Bonaparte who was very fat when he died, though he died of Cancer of the Stomach.

In the *Med. Times*, Dr. Van Buren reports a series of cases of *Strangulated Hernia of the Tunica Vaginalis* (Congenital Hernia), occurring in the adult, showing certain features as peculiar to hernia of the tunica vaginalis and dependent upon the mechanism of its formation, by which it may be distinguished from the more common variety of inguinal rupture, and deduces the following conclusion, that, if owing to the peculiar mechanism of this species of hernia, the stricture by which it is strangulated is always seated at the neck of its sack, as in all the cases which he reports, then it becomes a matter of practical importance that it should be recognized before operating; because any operation for its relief, which does not include the opening of the sack and division of its neck, will be obviously improper.

The same number contains an excellent paper on *Animal Odor*, by Dr. Van Allen, and recommends the investigation of the subject to the medical observes from its manifest bearing upon diagnosis.

In the *Med. Reporter* may be found accounts of fatal cases of poisoning by corrosive sublimate and by arsenic, and a description of a singular and obstinate cutaneous eruption occurring in Vermont.

The *Medical Examiner* contains an article well repaying perusal, *Digestion of Albumen and Flesh, and the Comparative Anatomy and Physiology of the Pancreas*, by Joseph Jones, M. D., of Georgia. We insert the following general conclusions arrived at from the study of the comparative anatomy and physiology of the Pancreas:

1. "In the invertebrate animals, this gland and the lymphatic system do not exist, because the character of the circulatory system and the manner in which it receives the digested matters from the visceral cavity, are such, that the conditions requiring their presence do not exist."

2. "In fishes, we may study the development of the pancreas, the permanent forms being but the transient conditions in the development of this gland in the higher animals."

3. "The assertion of M. D. Bernard, that the chief office of the pancreas is to prepare fatty matters for absorption, is sustained by the following facts :

a) "In the garfish (*Lepisosteus osseus*), the emulsion of the fatty matters takes place in the duct and cæca of the pancreas and their immediate vicinity, and nowhere else in the alimentary canal."

b) "The pancreas of carnivorous animals is relatively much greater than that of frugiverous and graniverous animals. The amount of oil consumed by the former is much greater than that consumed by the latter. It is reasonable to infer from these facts that the principal office of the pancreatic juice is the preparation of fats for absorption. This is further sustained by the fact that the size of the pancreas amongst carnivorous animals is in a measure proportional to the amount of oleaginous matters consumed. The pancreas of the active voracious gar-fish who destroys large numbers of small fish, is larger than that of the more sluggish fishes."

c) "The pancreas of carnivorous chelonians fed upon vegetable matters, degenerates in its structure."

The *American Medical Gazette*, amongst its other good things, has a *Translation from the German of Professor F. Bock, by S. R. Koehler*, entitled *Characteristics of Sam. Hahneman*, from which we extract this *morceau* :

Dear Mr. N.:—I send you herewith the necessary medicines, which I beg to use in the former manner. It will still become better. You promised to let me have \$10 right after the holydays. But I must beg of you to remit twenty dollars to me to morrow or the day after. You cannot believe what an amount of trouble and expense the preparation of my medicines causes me, to be able to effect with them what I really do effect, and the like no one can do but me.

Yours truly,

DR. HAHNEMAN.

Two respectable citizens of Leipzig (whose names can be ascertained through the author) gave me permission to publish the following:

1. Hahneman's daughter who assisted her father in Paris during his great house practice, assured Mr. N. that all the patients received only sugar-plums, made of milk and sugar.

2. When Mr. N. asked a daughter of Hahneman who lived in the same house with him, to give him some Homœopathic remedy against his illness, he was advised by her to drink tea, as the Homœopathic medicines were nothing but dirt.

DR. JOHN COLLINS WARREN, who has stood at the head of surgery in New England for more than half a century, and whose death we chronicled in our last number, was born in Boston, on the 1st of August, 1778. He was the son of Dr. John Warren, a distinguished physician and surgeon of this city, and nephew to General Joseph Warren, also a physician, who fell at the battle of Bunker Hill. He received his early education at the public Latin School, and graduated at Harvard College in the year 1797. After pursuing his preliminary studies in medicine under the direction of his father, he went to Europe, where he spent several years in obtaining a thorough medical education. On his return to Boston he soon obtained an eminent rank in his profession, and was appointed, in 1815, to the chair of Anatomy and Surgery, made vacant by the death of his father. This office he held until his resignation, in 1847, when he was appointed Emeritus Professor. He held the office of President of the Massachusetts Medical Society from 1832 to 1836. He was President of the Boston Society of Natural History, which office he held at the time of his death. Dr. Warren was a member of the American Academy of Arts and Sciences, of the American Philosophical Society, of the Philadelphia Academy of Natural Sciences, of the Academy of Naples, and of the Medical Academy of Florence; an honorary member of the Medico-Chirurgical Society of London, and corresponding member of the Royal Academy of Medicine of Paris.

In connection with Dr. James Jackson, he established and organized the Massachusetts General Hospital, with which institution he was connected during the remainder of his life, either as attending or as consulting surgeon. During the latter part of his life he devoted much of his leisure time to the study of paleontology, and had amassed a most valuable collection of fossil remains, including a very perfect skeleton of the Mastodon Gigantæus of North America, of which he published a description in a splendid quarto volume.

In conjunction with Dr. Channing and Dr. John Ware, Dr. Warren was editor of this Journal at the time of its commencement, and the first article of the first number (an account of several cases of facial neuralgia treated by division, or excision, of a portion of the nerve) is from his pen. We believe that the last paper which he contributed to any periodical, appeared in the Journal for May 17th, 1855, being

the history of a case of section of the os femoris for artificial hip-joint (Vol. LIII., No. 15). His writings on medical subjects consist chiefly of articles written for Journals; but he published a valuable work on Tumors, besides several smaller ones on various medical subjects.

We print below the interesting account of the last illness of Dr. Warren which was given by Dr. James Jackson, at a meeting of the Suffolk District Medical Society. Dr. J. remarked:

Dr. Warren's death could not be attributed to any disease which has a distinct name. For a long time his health had been bad, but there was no one marked affection. His friends had long observed a general falling off in his health. Some four years since he was induced to visit the South, and afterwards to go to Europe. From this last visit he derived some benefit. Two years ago he had an œdematous swelling of the feet. He had long before had some trouble about the heart, such as is common with old men, together with some other symptoms of disease, which were not regarded, however, as very alarming. In February last he sent for Dr. Jackson, on account of a slight ophthalmia, which he attributed to a sharp, cold wind. He had long been remarkably sensitive under such exposure. The ophthalmia continued to the time of his death, though it had then gradually diminished. This affection of the eyes seemed to be a slight affair, but it led him to keep his room darkened, and avoid out-of-door exercise as much as possible; and from the confinement, and accompanying depression, he became dyspeptic. He continued, nevertheless, to visit patients occasionally.

On two occasions within a month of his death, he was seized suddenly with vertigo, followed by copious fœcal discharges; but from these attacks he recovered, in each case within twenty-four hours. His last attack, on Saturday week before his death, was of the same nature, but with less of vertigo, and more abdominal pain. Dr. Jackson found him on the following morning low and weak, but with no extraordinary symptoms of disease. That day he remained in bed; but on the day following was so much better that he rode out of town, and there he walked in the garden, on the damp grounds, an exposure unusual for him. In the evening he was attacked for the first time with chills and rigors, had pains in the head and limbs, but most in the abdomen. On Monday morning his symptoms were aggravated with alternate chills and heat, a high pulse, parched tongue, loss of appetite, but uncontrollable thirst, and great tenderness in every part of his body. From that time he grew worse daily. He complained of great soreness on his left side, in the trunk and limbs. The tenderness appeared to be confined entirely to the integuments. His nervous system also was affected in various ways.

From this time his mind gradually failed, but he was at no time delirious. From 3 o'clock, P. M., on Saturday, the day before his death, he ceased to pay attention to those around him, being, in the common phrase, "struck with death," and remained lying motionless

on his couch, until 2 o'clock, A. M., on Sunday, when he ceased to breathe.

Dr. Jackson thought an examination would be very unlikely to show that the immediate cause of death was any local affection. He believed that distress of mind, added to the bad state of his health previously, had exhausted his vital powers. Dr. Warren had sometimes been called cold, but his (Dr. J.'s) observation satisfied him that he possessed strong and deep feeling, though he seldom exhibited any outward emotion. The death of his first wife preyed on his feelings for a long time. When older and more feeble, he was affected in like manner, more powerfully, by the loss of his second wife. At these times he did not show any outward marks of grief, but his vital powers were sinking under his mental suffering. Just so during the past few months he has been overcome by sad tidings respecting the health of his son, who is abroad. But Dr. J. refrained from the discussion of his subject.

He hoped more eloquent lips would describe to them the talents and virtues of his lamented friend. Most of those around him had listened to Dr. Warren's instructions, for these had been given to more than one generation of pupils.—*Bost. Med. and Surg. Journal.*

[CORRESPONDENCE.]

MESSRS. EDITORS:—The subject of making the city of Washington a permanent place for every third meeting of the American Medical Association, and a depot for the transactions and archives of said society, was at different times brought up to the notice of the last meeting of this body in the city of Detroit by Drs. Atlee and Dorsey, without any action or expression being made in the matter.

Permit me to propose for a substitute the city of Philadelphia for the city of Washington, for further consideration as being more central and convenient for the meetings of the Association, and equally safe for the keeping of its records, especially in the hands of the University. It should belong to Philadelphia where American medical literature and instruction had its birth, and ever since the establishment of its first school in medicine, has sustained a character second to none in this country, and of good report abroad. These reasons, in addition to the just sense of its high claim and the affectionate regard which must animate the feeling of all not under the influence of some selfish motives for the place, would in my opinion fully establish the right of Philadelphia to claim as the general wish, to place the archives of the American Medical Association in possession and under the care of its friends in that city.

Respectfully Yours

N. D. S.

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