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JOURNAL

OF THE

MEDICAL SOCIETY OF MAINE.

No. 1....Vol. I.

FOR JANUARY, 1834.

HALLOWELL:
GLAZIER, MASTERS & Co.
1834.

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INTRODUCTION.

It is now about thirteen years since the organization of the Medical Society of Maine.

The first Legislature of Maine convened, May 31st, 1820, and the winter succeeding, members of the Massachusetts Medical Society residing in Maine, commenced the formation of a Medical Society, and for this purpose, met at the Seat of Government, Portland, and chose Nathaniel Coffin of Portland, *President*, Jonathan Page of Brunswick, *Vice President*, B. D. Bartlett of Bath, *Corresponding Secretary*, and Samuel Ayer of Portland, *Recording Secretary*.

The first annual meeting of the Society was holden at Massachusetts Hall, in Brunswick, on the 4th of September, 1821. At this meeting, Luther Carey of Turner was chosen *President*, (on the resignation of Dr. Coffin) Ariel Mann of Hallowell, *Vice President*, B. D. Bartlett of Bath, *Secretary*, and Jonathan Page of Brunswick, *Treasurer*.

It was at this meeting, that a proposition was received from the Medical faculty of Bowdoin College, for the Society to unite with them; offering the Society by their Committee of Censors, an equal vote with the faculty, on the question of recommending the Candidate to the College Boards for the degree of M. D. A proposition of so liberal a character, from a Medical College so recently formed, and under some of the most distinguished instructers of the country, was cheerfully accepted by a vote of the Society, nem. con.; and the Society has ever since been represented by a Committee appointed for that purpose, at the examination of Candidates for their Medical Degree.

The Act, incorporating the Medical Society, was passed, March 8th, 1821, and included the names of most of the members of the Massachusetts Medical Society, with such others as were suggested by members of the Legislature, at the time of the enactment.

The 5th and 6th Sections of this Act, require the Society to "*prescribe such Medical instruction or education as they shall judge requisite for candidates for the practice of physic and surgery, previous to their examination ;*" and for this purpose it is further required, that "*three, at least, of the examinors or censors aforesaid, shall convene in the town of Brunswick on the Tuesday next preceding the* 1*st Wednesday in September, in each year, and at such other times and places as the by-laws of said Society shall direct.*"

The Officers of the Society are, a President, two Vice Presidents, a Corresponding and Recording Secretary, a Treasurer and Librarian, seven Censors, from one to three Counsellors in each of the ten Counties, and a Standing Committee of three.

The Officers of the Society for the present year, are

B. D. BARTLETT of Portland, *President.*
BURLEIGH SMART of Kennebunk, 1*st Vice President.*
MOSES SWEAT of Parsonsfield, 2*d* " "
JAMES MCKEAN of Topsham, *Corresponding Secretary.*
MOSES SHAW of Wiscasset, *Recording Secretary.*
JONATHAN PAGE of Brunswick, *Treasurer.*
Librarian.

CENSORS.

B. D. BARTLETT of *Portland.*
JOHN HUBBARD of *Hallowell.*
MOSES SWEAT of *Parsonsfield.*
J. GILMAN of *York.*
J. W. MIGHLES of *Minot.*
L. GAGE of *Waterford.*
GEORGE PACKARD of *Saco.*

COUNSELLORS.

York—M. Sweat, B. Smart, J. Gilman.
Cumberland—J. W. Mighles, E. Wells, Jonathan Page.
Lincoln—J. McKeen, M. Shaw, A. S. Clark.
Kennebec—J. Hubbard, J. Barker, Alfred Pierce.
Oxford—Drs. Tewksbury, Kittredge and Griswold.
Somerset—Drs. Bowen and Eastman.
Hancock—Dr. Stevens.
Penobscot—Drs. Dickinson and Burleigh.
Waldo—Drs. Eastabrook and Munroe.

The *Annual* Meeting is, by an Act of the Legislature, to be holden at Brunswick on the day preceding the Commencement of Bowdoin College. The *Semi-annual* meeting is holden at the seat of Government on the Wednesday succeeding the meeting of the Legislature.

Sec. 3d of the Constitution of the Society, prescribes the following requisitions for MEMBERSHIP.

"Immediate members shall consist of medical gentlemen residing within the State of Maine, and for their admission it shall be necessary that they shall have received a Diploma from some University; or shall be considered respectable in the practice of Medicine. They shall be proposed by two members practicing in the vicinity of the residence of the Candidate, one stated meeting previously to being balloted for, and approbated by at least one of the Counsellors belonging to the District in which the candidate resides; and it shall require a majority of the members present for their admission. And no person shall be admitted a member of this Society who shall not have been in the practice of Physic at least THREE YEARS, previous to being voted for. Every person elected or admitted a member shall be notified thereof by the Corresponding Secretary; and upon declaring his assent in the manner required by the laws of the Society, shall receive from the Recording Secretary a Diploma.

The engraving for the Diploma is one of the finest in the country, and was made in our own State. The Device was formed by a member of the Society, and is founded on that scene in Virgil, where Æneas is wounded, and IAPIS, the Physician, endeavors to extract the arrow. Venus is seen descending from the clouds to his aid. On the right, is the Seal of the State.

Over the Device, is this *motto*; (which it will be recollected was applied to Iapis by the poet.)

"Scire potestates herbarum usumque medendi
Maluit, et mutas agitare inglorius artes."

The Committee have it not in their power to state the whole number of members of the Society at the present time. Eighty-eight have, however, attended the different meetings, and subscribed to the Constitution and By-laws.

We have been thus minute in this account of the Society, from a conviction, that little has hitherto been known or said of it, except by those who have attended its meetings.

It could not be expected that a Society thus formed in the infancy of a State of so extensive a territory and sparse a population as Maine, could offer much to the medical public at the present time.

The objects of the Society, being, in the language of its Constitution, "the promotion of Medical Science generally, and the regulation of the practice of physic and surgery in Maine;" one of the first questions that presented itself for the discussion of the members was, the expediency of forming a Library. But the distance of most of the members from the necessary location of a library, was urged, prospectively, as an argument against its utility to them individually. It was this objection to the formation of a library, *that gave rise to this publication.*

The following vote will, perhaps, best explain the views of the Society on this subject.

"*Voted*, that a Committee be appointed, who shall cause to be published annually, in pamphlet form, such cases and articles, original or selected, as in their estimation deserve it; and that one copy be presented gratis to each member of the Society, and to any other member of the profession, upon his paying a reasonable price for the same."

Those to whom the charge of this compilation was committed, have not deemed it their duty to search the annals of medical science with a view to present rare and anomalous cases to their medical brethren; but their principal aim has been to embody such original cases as have occurred in the daily practice of the members, and thus, as it were to throw the members of the Society on their own resources, and introduce a system of reciprocal instruction and improvement.

It was presumed that most of the members were furnished with good private libraries, and some of the best foreign and domestic Journals. Little more, then, could be done, than to collate, select and condense the medical information of the day, and by uniting this with such original cases as were presented to us, to adapt the whole to the wants of the profession in Maine.

The advantages of our medical brethren in cities, where a crowded population presents such frequent opportunities for *post mortem* examinations—their ready access to all the improvements in medicine and the collateral or accessory branches of natural

science—their frequent and repeated intercourse with each other, afford a striking contrast with the disadvantages of the profession in a State like this, where a population of little over four hundred thousand is scattered over a territory of more than thirty thousand square miles, and where the physicians from their necessarily isolated locations, can have but little intercourse with each other.

As these disadvantages must be felt by every member of the profession in our State, we have alluded to them rather in the the language of apology than compiaint.

The Committee on their part have many apologies to offer; but they forbear to trespass on the patience of the reader by recounting the numerous and inevitable obstacles that have interposed in commencing even this small compilation. They are aware that formal apologies for the introduction of any new work, especially on a new occasion, afford no security from the censures of legitimate criticism; yet, those apologies may, in some measure, repress expectations which the Committee feel themselves incompetent to satisfy.

Another important object of this Journal is, to interest *distant* members of the Society in its success. Members of any association of this kind are apt to complain, that "they pay their annual tax without receiving any equivalent in return." Now let us impartially inquire whose fault this is? Is not the fault generally found at the door of the complainant himself? In order to derive that intellectual benefit from a Society which he thinks himself entitled to, is it sufficient for him merely to pay his annual assessment in money, and stop here? The funds created by such a tax, it is true, answer to pay the publisher for his manual labors; but can the complainant, in such case, expect to receive benefit from that intellectual source, to the supply of which, he has contributed nothing?

The labor and difficulty which the Committee have had in procuring the reports of even the few original cases contained in this Journal, are evidence, that the Society collectively has better cause of complaint against individuals, than individuals against the Society.

While the Committee deeply regret that the great distance of many members of the Society must preclude them from the plea-

sure of a personal interview with each other at our meetings, they cannot but hope, that this Journal, if continued, will afford a medium of professional correspondence, that must ultimately promote an unity of feeling and interests.

The growth of a Society like ours, must, from necessity, be slow; for as a general maxim, the remark of Tacitus may be true, that "Corpora lente augescunt, cito extinguuntur." Hence the necessity of our commencing at so early a date, a publication of this kind. For however humble may be this specimen of the state of medical science in Maine, the Committee cannot but hope, that the members of the Society have ample resources within their own precincts, to render future publications of the kind both interesting and instructive.

MOSES SHAW,
Per order of the Committee.

MAINE MEDICAL JOURNAL.

Case of Lacerated Uterus.

REPORTED BY DR. I. SNELL, OF AUGUSTA.

Cases frequently occur in the practice of Physic, Surgery and Midwifery, which excite much interest at the time, and occasion not a little perplexity and anxiety to the physician and distress and danger to the patient. If concise and correct histories of such cases were preserved and published, they would be both interesting and useful, particularly to young practitioners; but, as they exist only in the memory of the physician, they are soon forgotten and lost.

In no department of the profession will these observations apply with more force, than in diseases of women; especially those incident to pregnancy and parturition. The customs and prejudices of society exclude medical students almost entirely from personal attendance in such cases; consequently they, from necessity, commence business with very little practical knowledge, even in common and natural cases. In such as are originally preternatural and difficult, or are rendered so by untoward circumstances, their knowledge must of course be more limited and inadequate. To a young man thus engaged, a well written history of a similar case is emphatically a light shining in a dark place. To the truth of this, I can attest by my own experience.

Few, if any, cases incident to pregnancy and parturition, are more perplexing to the physician, and distressing and dangerous to the patient, than that of extrauterine fœtus. It is fortunate that such cases are not frequent. In more than thirty years' practice, I have seen but three cases of extraute-

rine conception. In one of these, the child was, after several years, discharged per anum; the bones separately, at different times; the soft parts in a state of dissolution, with the feces. In another, after several years and much suffering, it was taken, piecemeal, from an opening in the linea alba. Both of these women are alive and enjoy health. The other, a woman of a feeble constitution, sunk under her burden. I, with the attending physician, made a post mortem examination. We found the child in the colon. Decomposition had so far taken place, that no organization of the soft parts could be discovered. The bones were generally entire. Several of the bones of the fingers were in the fallopian tube, at the extremity of an oblong sac, which adhered to, and communicated with, the colon. This circumstance shed light on the pathology of the case. It indicated, that the sac, which was formed by the dilatation of the tube, had been the residence of the child; and that it did not pass into the colon until after decomposition of the soft parts.

Cases of lacerated uterus are, I believe, more infrequent and dangerous than those of extrauterine fœtus. I have seen but one in the course of my practice; which, as it occurred to a patient under my care, will be the subject of this communication.

On the second of August, 1831, I was called to visit Mrs. —— aged 36, a person of a robust constitution, in her sixth travail. All her children were stillborn, and, as she stated, all were taken without the aid of travail pains, and most, if not all, with instruments. I made an examination in the evening, found the os tincæ considerably dilated, and a natural presentation of the child. The pelvis appeared to be well formed, and of good dimensions. The pains were regular, frequent, and of usual force for that stage of the travail; they, however, soon abated in force and frequency, and were desultory through the night. In the morning, I again examined, and found, that the labor had progressed beyond my expectation, considering the feebleness and infrequency of the pains. Presuming the pains would soon become regular, I encouraged the patient to expect a favorable result, and that she would be delivered in a short time. The external parts of generation were tumefied and tender, which I attributed to a stillicidium of urine, that

the patient told me had troubled her for a month. I left the room to take some refreshment,—during which time, as the woman informed me on my return, she had a severe pain, which, she thought moved the child. I examined, but could find neither the child nor os tincæ. The patient was soon taken with distress, faintness, nausea and vomiting. The parts being, as before stated, swollen and tender, I did not introduce my hand;—I could not with any practicable force. I however went so far as to trace the termination of the vagina back toward the rectum, and laterally; but forward, a hard substance pressed on the os pubis, so as to prevent any examination above it. Suspecting a laceration of the uterus, I suggested the propriety of a consultation.

A physician of experience and celebrity was called. Before his arrival, the more alarming symptoms had abated. He examined the patient and suggested that I might have misapprehended the case; that, in his opinion, the pains were spurious and travail had not commenced. To be sure, I did not at first examine with the care and precision I should have done, had I apprehended what was to take place. I, however, could not think that I had been deceived. As the more urgent symptoms had measurably subsided and the patient now experienced nothing like travail pains, we perfectly agreed that nothing should at present be done with a view to expedite delivery. The pulse had risen and the patient complained of distress in the abdomen, about the scrobiculus cordis and on the right side. I took, therefore, from twelve to fifteen ounces of blood; gave an anodyne and left her for the day.

In the evening I visited her again; found her sitting on the side of the bed, in great distress for breath and with severe pain in the sides about the region of the diaphragm; and she said if she attempted to lie down it stopped her breath entirely. I directed her to be set over a vessel of warm water, and warm fomentations to the abdomen and sides. Afterwards, I with much difficulty, induced her very gradually to recline a little, that I might have an opportunity to examine by the vagina. The soreness and tumefaction were much increased, in consequence of the free examinations in the morning. The os tincæ was still imperceptible and the tumor pressing upon the os pu-

bis precluded any further investigation. I directed fomentations to the tumefied part, and repeated the anodyne.

On the 4th I found her rather more comfortable. She had some rest in her chair. She could not lie down. As nothing had passed her bowels for two days, I gave oleum ricini, with directions to assist its operation with injections, if necessary. I visited her again in the evening; found no essential alteration since morning. The physic had produced but a partial operation. I directed salts and senna on the following morning which operated freely and gave considerable relief. To prevent repetition, I will state, that from this time the bowels continued loose, at times relaxed, and no more physic was required in the case, notwithstanding the frequent use of anodynes.

The patient gradually became more comfortable, and my visits consequently less frequent. As she had nothing like travail pains, and the parts were sore and irritable, I made no examination by the vagina from the 4th to the 14th of the month. I then found them much swelled, very sore, and thickly covered with a gritty substance not unlike sand paper. The vagina was lined with the same. It was doubtless a deposition from the urine, and was occasioned by its constant stillicidium and remora on the inflamed membrane. I have seen a similar collection adhering to the wound after the operation of Lithotomy.

The patient at this time informed me, that when she had her second child, "the doctor," to use her expressions, "tore a hole in her bladder with his blunt-hook; and she had not been able to hold her water since." I directed the pudenda to be washed with milk and water, and the same to be injected up the vagina, night and morning. Under this treatment the inflammation soon abated; and after a few days the substance separated and came away, as thick and coherent as velvet.

At this examination I felt the os tincæ near the pubis. It was not rigid;—I could introduce my finger within its orifice. Had not the external parts been sore and swollen, I should have examined farther; but as they were, I deemed it best to delay a few days. To this time there had been no discharge from the vagina, except urine.

The patient and her connections frequently urged me to take the child, alleging that her former children were taken without

travail pains, and they thought this might be, as well. It was with no little difficulty that I made them sensible of the difference in her situation. I repeatedly expressed a willingness to consult with any regular physician; but gave it as my decided opinion, that nothing could, at present, be done for her relief. As the soreness and swelling of the external parts were daily subsiding, I indulged a hope that the time would soon come when I could pass my hand, and dilate the orifice of the womb; and take the child, or at least rupture the membranes.

But on the 18th the husband came to me with a request, that I should visit her immediately, as she was flowing profusely. I went with a heavy heart, thinking the case had come to a crisis, that something effectual must be attempted, and doubting if any effort could benefit her. I found her situation not so desperate as I feared; the discharge was not blood, but the waters tinged with blood. I examined, but could perceive no difference in the situation of the parts. I indulged a hope that travail pains might soon succeed the evacuation of the waters; but I was disappointed; nothing like travail pains occurred, as I learned on the following day. The tenseness of the abdomen had abated a little. The patient, at this visit, informed me that there was an unusual appearance and soreness about the umbilicus. I found the part swelled edematous, and discolored. I recommended friction with anodyne balsam, and the malt poultice. The tenderness and discoloration increased daily, and by the 22d, the integuments were in a state of mortification, and a fluctuation was perceptible in the tumor. The strength of the patient was failing daily, her spirits were sinking; the gangrene was extending; and the discharge from the vagina growing more fetid. I proposed another consultation. The same physician was called; the same opinion entertained and the same course recommended as at first. The teguments were completely mortified and thin over the fluctuation at the umbilicus. We punctured them, not without apprehension that we should find a piece of the omentum in a state of gangrene. The discharge was similar to that from the vagina, which had continued since the 18th.

On the 23d, I learned that the discharge from the umbilicus had been copious;—that from the vagina small. The size of

the abdomen had lessened perceptibly. The mortification had extended and the discharge was intolerably fetid. The opening at the umbilicus had enlarged, by the sloughing of the teguments. The strength and spirits had sunk greatly in twenty-four hours. It was evident that if the patient could not be soon relieved from her burden, death would relieve her from distress. I examined at the opening, first with a probe, then with my finger. I could feel a hard smooth substance which, I concluded, could be no other than the child. This opinion was corroborated by the similarity of the discharges from the vagina and umbilicus, and also by the cessation of the former on the commencement of the latter. I acquainted the patient with my opinion of the case, and named an operation as the only means that gave any expectation of relief.

On the following morning several of the neighboring physicians were invited to attend. We investigated the case again, and were unanimous that an operation was proper and necessary.

The patient was placed on a table of convenient height. I extended the opening from the umbilicus toward the scrobiculus cordis, from one to two inches, as far as the mortification extended; and toward the pubes, in the linea alba, about six inches, conveying my finger under the teguments to protect the tumor and viscera from the knife. The left shoulder presented. The hand and arm passed out at the incision, which were returned, and the child taken by the feet. I then introduced my hand, and likewise my arm, (for the cavity was fearfully deep and capacious.) I felt for the placenta, which I found at the bottom of the cavity, apparently adhering to the uterus. I carefully separated, and removed it. The cavity contained considerable fluid, blood and water, in a putrid state, intolerably offensive. It was difficult to ascertain by feeling, whether the placenta grew to any of the viscera, or was retained by contraction of the uterus in the lips of the wound. This question was afterwards decided by a circumstance that will be stated in its place. I examined the cavity with as much freedom as I deemed prudent. The intestines appeared to adhere together, and their coats to be thickened and not so smooth as natural. They with the other viscera and the peritoneum lining the pari-

etes of the abdomen, so adhered as to form a sac which contained the child and waters. This adhesion was doubtless a consequence of slight inflammation induced by the irritation of the child and membranes, when they first passed from the uterus. To this circumstance the patient probably was indebted for her life; for had the tender coats of the intestines in their natural state, come in contact with the fluid, acrid as it was at the time of the operation, puritoneal inflammation would, in my opinion, have followed and have destroyed life in a few hours.

After removing all extraneous matter from the cavity, I brought the integuments together, secured them with three stitches, adhesive plaster, compresses, and a swathe around the body, put the patient to bed and gave her an anodyne.

The child weighed about five pounds, probably considerably less than when it first passed from the womb, as putrefaction had taken place to a great degree. The question was asked, whether it was an extrauterine conception, or a laceration. Some of the physicians present observed, that we probably might have an opportunity to ascertain, and settle the question by a post mortem examination in a few days. The point was made certain in a more pleasant manner.—The injections had been continued, up the vagina; and four days after the operation, the nurse threw up an injection, perhaps with more than usual force, when the most of it passed out at the wound, much to the alarm of the patient.

She rested better on the night after the operation, than she had since the beginning of her sickness. The discharge was very copious. It was necessary to dress and cleanse the sore night and morning, for several days. The discharge, however, daily became less copious and less fetid. Very little inflammation or fever succeeded. Her appetite soon returned, and the patient improved perceptibly every day, in health, strength and spirits. She was able to attend to the concerns of her family in five weeks. I hoped the incision would mostly heal by the first intention. The constant discharge of matter and frequent removal of the dressings frustrated this intention. I used the interrupted suture. Perhaps the pins used to unite harelip might have kept the parts more steadily in contact. The opening at the umbilicus, that took place as a consequence of the mortification and sloughing of the teguments, would have

been sufficient for the discharge of matter, even had the incision wholly healed by adhesive inflammation.

The wound closed in about ten weeks. The catamenia returned in between two and three months, and continued regular. The woman enjoys comfortable health ; has regained her flesh more than her strength. She finds it necessary to wear a swathe to support the abdomen.

Case of Ruptured Uterus.

BY DR. JAMES AYER, OF NEWFIELD.

To Samuel Emerson, M. D. President of the Medical Society of Maine.

Dear Sir,

In compliance with your request, I undertake to report a case of Ruptured Uterus, in which I had the honour of meeting with you.

But as it has fallen to my lot, in practice, within a few years, to have three cases of Ruptured Uterus, all of which have terminated fatally, I shall take the liberty to give a short statement of each.

The first which took place, was in the town of Limerick, Dec. 1824. The patient was about 44 years old, had had a number of children and generally easy labors: She had been in labor about twenty-four hours when I first saw her, her pains had been very strong for several hours and the child descended very low in the pelvis, the soft parts were completely dilated, the perineum very much distended, &c.

When I passed my finger into the vagina to make an examination, I found a shoulder presented with the head reflected over the os pubis. I immediately prepared for turning the child, and having placed the patient on her hands and knees on the bed, in order to take off the force of the abdominal muscles, I introduced my hand with great ease, and having found the feet of the child, took hold of them and made the necessary evolutions, and with more ease than I ever experienced in a similar case, turned the child and took it away.

Having given the child, (which, by the way was dead,) to an attendant, I wound the funis around my finger in the usual way and passed the fore-finger of my other hand into the vagina to search for the placenta; and to my astonishment, put it immediately into a rupture or slit in the uterus: the rupture was in the fore part of the uterus immediately over the os pubis and was about four inches long.

I took the placenta without difficulty and the patient was put to bed, she was soon taken with rigors and vomiting, and died in about twenty-four hours.

CASE II.

The second case took place in Newfield, July 2d, 1826, the patient was about 34 years old, she had had three or four children. I was called to her on Saturday night, but her pains were light and trifling; I left her in the morning with directions to call me when her pains came on, was called again about noon, but when I had arrived her pains had abated; on examination I found the waters evacuated, a natural presentation, except the funis had fallen down before the head. After waiting on the patient a few hours, it was determined to call in another physician; accordingly Dr. —— was called, who arrived about sunset. We had a consultation and then attempted to take the child,—tried the *vectis* first and then the crotchet; but nothing that we could do, would cause the head to advance; we took turns in waiting upon her until a little before day, when we found she was sinking; we gave up trying to take the child and tried to support her with cordials, &c.—but she died in a short time.

Post mortem examination. On cutting through the parieties of the abdomen we discovered a knee of the child which passed through a rupture in the uterus about four or five inches long, we enlarged the wound and took out the child, as well as a large quantity of blood which was lodged in the cavity of the abdomen.

I noticed in examining per vaginam, before the patient died, that the os uteri dilated in a singular manner, which was in the usual way, except one side, which formed a straight line, and on dissection I found that the rupture in the uterus was nearly over the part of the os uteri which was straight.

The patient complained of great soreness and distress in the umbilical region, and, in fine, she complained of very little else. The rupture was in the anterior part of the uterus a little above the pubes and nearly in a straight line from the neck to the fundus.

CASE III.

The third and last I have had was in Waterborough, Nov. 1st, 1830. The patient had had a physician with her about 24 hours when I first saw her. I soon learned that an arm presented, and by passing my fingers into the vagina, I could feel the chin and mouth of the child; I made an attempt to introduce my hand into the uterus, in order to turn the child but as it did not pass easily, I withdrew it and concluded to wait a while, and see if the head could not be brought into the passage, as it appeared to lie so near.

After waiting upon the patient two or three hours, and trying in various ways to give her assistance, but without effect, I took the case under more serious consideration, and soon became satisfied that there was a Rupture of the Uterus; I stated my opinion to Dr. K. —— (who was her first physician,) he said he had never seen a case of the kind, but thought it must be so. We informed the patient and her friends, that we thought the case would prove fatal, and requested further assistance. This was about ten o'clock, A. M.: the patient about this time was taken with vomiting and continued so, with short intervals until near her death, which took place about 12 at night. On putting my hand into the patient's bosom, I could feel a large tumor in the epigastric region, which I was unable to account for, while the patient lived, but on post mortem examination, found it was caused by the fundus or upper part of the uterus, which was nearly insulated and occupied this region: I could also feel a foot of the child in the upper part of the abdomen and could distinctly tell the toes.

Being fully satisfied with the nature of the cases, we concluded not to take the child, which, we were satisfied, would only shorten the patient's life, we therefore waited upon her and administered such medicines as the case seemed to call for: She failed gradually, until death closed the distressing scene about midnight.

On opening the abdomen, the first stroke of the scalpel was where the foot had been felt which exposed the foot to view; the incision was continued so far, that we took the child, which, was wholly out of the uterus, and that was rent in a shocking manner, insomuch that the upper part was nearly separated from the neck and had contracted into a large globular form, nearly as large as a child's head, and occupied the epigastric region, as before stated. From what information I could obtain respecting the case, it was evident, that the rupture had taken place sometime previous to the commencement of labor; the mortification had taken place in the part of the uterus where the rupture was; a large quantity of blood occupied the cavity of the abdomen. The upper part of the uterus was contracted so that it had the appearance of a solid mass of flesh and was connected to the vagina only by a small portion, which was separated by the scalpel.

I brought the uterus home with me, in order to examine it, but on account of its putrid state, was unable to make a very minute examination; however, I sufficiently examined it to be satisfied that a scirrus did not exist in the uterus, but that it was a contraction. The patient was about 42 years old, had had several children and generally hard labors; her abdomen in time of uterine-gestation, was very pendulous, more so than I had ever seen in any other patient; of course the abdominal integuments had become very thin, as appeared on dissection.

In cases of *Ruptured Uterus* where the child cannot be taken in the usual way, I think it much better and perhaps more humane to wait on the patient, and administer such cordials both to body and mind, as the case seems to require to render life comfortable while the poor patient lives, (which at most can be but a short time,) than it would be to perform the ceasarian operation or some other harsh operation, which would only distress the patient to no good purpose and bring on instant death.

In all the cases of *Ruptured Uterus* that have come to my knowledge, the patient has died, and indeed, it seems almost impossible, that they should terminate in any other way.

In the three cases above stated, it is uncertain at what time the laceration of the uterus took place, but in the second and third, I think that it must have been early in the labor or per-

haps before the commencement, as there was nothing like labor-pains in either case after the rupture of the membrane; and in fine, the patients in the two last cases complained of great distress and soreness in the abdominal regions.

So far as my experience extends in cases of *Ruptured Uterus*, I think the rupture is generally anterior and in a direction from the pubes to the fundus-uteri.

Newfield, January, 1831.

Case of Tetanus.

BY DR. BURLEIGH SMART, OF KENNEBUNK.

March, 1824.—Visited R. S. Æt. 22 years, unmarried.

On approaching the house my ears were pierced with a scream and immediately an attending female came running out and desired me to "make haste" as the cramp "had taken her," she said, and "they expected every minute her jaws would lock."

On stepping into the room my eye was arrested with the view of a pale ghastly visage; eyes rolled up, angles of the mouth retracted; nostrils drawn upwards and the cheeks backward and mouth closed; altogether, forming an expression of indescribable suffering—trunk lying extended on the back, head and heels only touching the bed; the spine rccurvated into an arch of almost a semicircle, and jaws locked.

In about a minute the spasm subsided and she swallowed a teaspoonful of Oleum Terrebenthina; from which she experienced immediate relief.

In about five minutes the oil was repeated in the same quantity, for a partial return of the cramp, as the attendants termed it; which was that violent constrictive pain darting from the ensiform extremity of the sternum to the spine and extensor muscles of the neck: the pathognomic precursor of a spasm of trismatic tetanus.

In the intervals of the spasms, as she had but a few slight returns of them at this time, she gave me the following history of her case.

Of a feeble constitution from infancy—three years ago her health became impaired; the prominent features in which were,

that errant appetite, termed by Good, "Limosis picæ;" to gratify which she had for a long time and in large quantities, eaten magnesia, chalk and clay; with a troublesome ciphaloea and other marks of a derangement of the chylifactive organs. Menstruation irregular in periods; deficient in quantity and undue in quality.

About a year ago she became afflicted with sharp pains through the abdominal and uterine regions; accompanied with heavy bearing down sensations like parturient contractions of the uterus; swelling and exquisite tenderness of the abdomen and retention of the urine, requiring the repeated use of the catheter. After some weeks suffering in this situation she was attacked with trismatic tetanus, the trismus continued 48 hours; during which time the tetanus afflicted her in paroxysms.

This is a trait that has been apparent in every attack of the tetanus. About this time there was a discharge of a considerable quantity of fetid matter per anum et vaginam; after much suffering of this bearing down sensation, conjoined with a pricking, tearing or lacerating feeling, an angulated piece of earthy matter was discovered in the vagina and removed; of a light colour, interspersed with white spots of a hard and compact texture.

The second attack of trismus was about a month subsequent to the first. The trismatic spasm continued between three and four days and left her spontaneously. This was followed by a dejection of the earthy matter which her attending physician had already pronounced to be the product of "gravel of the womb;" for so he named her disease.

The third attack was seven or eight months subsequent to the second. This continued, the spasms alternating with intervals of freedom from them, about a month. This was in September preceding the next March, when she came under my notice. In the intervals of these attacks of trismatic tetanus, she was not free from any of the concomitant affections; only suffering them in an inferior degree than seemed necessary to induce the tetanus.

When she came under my care she had been laboring under alternations of spasms and intervals of comparative ease for about a week; during which time, the violence of the spasms

had been moderated by the use of laudanum and bleeding, under the direction of Doctor Samuel Emerson, who can confirm most of the facts stated.

The bleeding always produced a resolution of the trismatic spasm, as often as tried, when carried to the induction of incipient deliquium; but this relief was only temporary. She was now directed to take a teaspoonful of the Ole. Terebinth, Ext. Cicuta 5 grs. and Calomel 5 grs. alternately every hour. Next day saw her—no return of the tetanus—freedom from the cramp and pains in the uterine region—a number of copious dejections from the bowels. Used the catheter and removed some of the earthy matter from the vagina. Intervals of the medicines were now lengthened.

Two days after, saw the patient, no return of tetanus—Ptyalism—Catheter used and more of the earthy matter extracted which was always found in the posterior and superior part of the vagina, corresponding to the anterior portion of the rectum, the projecting portion of the cervix uteri being carried forward toward the symphysis pubis and the superior portions of the matter were always found occupying this space made by this anterior position of the cervix uteri, and the recto-vaginal septum. The os uteri was always found impervious; nor could any fissure or opening be detected by the most careful and often repeated manual examination: the relative situation of the parts however, was such as to prevent the examinations being satisfactory.

The patient continued exempt from any tetanic affection about 10 days; the gastric and abdominal pains being rendered *tolerable* by the free use of Ext. Cicuta, two or three times, alternated with Ext. Stramonium, which, when exhibited in sufficient quantities to relieve the pain, was productive of derangement of the cerebral functions. The turpentine was held as "corps de reserve." About this time a hard circumscribed tumefaction in the right side of the hypogastric region, was discovered occupying a line drawn from the umbilicus to the superior anterior spinous process of the ilium of the corresponding side: exquisitely tender, inelastic and incompressible; which was asserted to have been noticed for a long period of time. She was now directed to keep the bowels pervious and use the Terebinth and Cicuta "pro re rata." It should be remarked

"en passant" that every attack of tetanus, succeeded by a dejection of the earthy matter, was followed by a copious secretion of milk and occasionally mammary abscess.

In a few weeks the patient was able to visit me, a distance of 8 miles; but she suffered much abdominal pain from the motion of the carriage.

The 2d day subsequent to her visit I was desired to see her; when she observed, by writing, her jaws being locked, that her suffering from excruciating pain had been inexpressibly severe since her ride—that she now felt a consciousness that her situation was more perilous and the event more precarious than it had ever yet been at any time heretofore; and that this opinion arose from her feelings being so different from any she had ever before experienced—that the abdominal tumor had descended—that powerful but ineffective expulsive efforts were suffered, and a sensation as if a large body was tearing and forcing its way through so narrow an aperture that she could not survive the suffering necessary for its exit.

The jaws were now opened by bleeding and the same prophylactics used as before. But the latter were unavailing, notwithstanding sufficient quantities of calomel were introduced to produce a smart degree of ptyalism, two diseases deemed incompatible by Caldwell and Physic: another among the many proofs of the futility of theorizing when not based on rigid and legitimate deductions from *facts*, the substructure of every thing certain or scientific.

After bleeding was deemed improper, suppositories, containing about 20 grs. of pulv. tobacco, with 5 of opium, were directed to be used per anum: the use of the first in about 2 hours was followed by nausea, vomiting and a solution of the Trismatic spasm of 48 hours standing. She had before, objected to the enematous form of exhibiting the remedies, as she now did, to the suppository form, from the topical distress they occasioned: she was therefore desired to permit the same remedy to be used per vaginam; which she did a few times with success; but eventually this form became effete; not, however, till she had repeatedly been annoyed with the *taste* of the *tobacco in the mouth* at every supervention of vomiting subsequent to the introduction of the remedy.

After this form became effete, a piece of a fig of tobacco, used in the same way, with a ligature around it, by which it might be withdrawn on the accession of the vomiting, induced by the use of this very powerful counter-stimulant, was productive of like effects to the preceding form. The last form also, soon proved ineffective.

It was now found that the remedies used for the tetanic affection, paralysed those expulsive efforts by which the dejection of earthy matter was effected; it was therefore deemed advisable to suffer the disease, insomuch as was compatible with safety, to take its own course, with the hope that the expulsive efforts would prove adequate to the dejection of the earthy matter and thereby put a period to the paroxysm, as the descension of that substance was always the exciting cause of the Tetanus.

By the use of the aforementioned means the pains and spasms were a little mitigated for a few days, and twice the jaws were opened by the tobacco; once, about 20 minutes, in which time she drank a tumbler of water; the other time about 15 minutes, in which she was unable to swallow any thing by reason of the distressing nausea occasioned by the tobacco. With the exception of these intervals, the jaws were uninterruptedly locked for the space of 8 days and as many nights; the tetanic spasms harrassing her at more or less distant intervals and the abdominal pains. During the first few days the severity of suffering seemed slightly mitigated by the remedies used; but they soon all lost their assuaging property and the disease seemed to defy every remedial power and appeared stalking on with hideous aspect and hasty strides to its fatal consummation.

She had now lain eight days without food or drink, save one draught of water, and suffering the most excruciating torture. The vital powers now appeared rapidly *sinking* never to rise again. In this situation it was determined to make one desperate effort to rescue the victim, thinking with Celsus, that " satius est enim anceps auxilium experiri quam nullum," and from what knowledge I had of the gigantic powers of tobacco in prostrating the powers of animal life, the conviction forced itself upon the mind that if the powers of animal life could be subjugated by this potent agent, that the disease would yield with its subjugation;

for its seat and throne is in animal life, not organic. It was determined to make a cautious repetition of the remedy, in small quantities, until some powerful effect was wrought either upon the disease or the subject. An infusion of tobacco was prepared and a part injected intra anum et vaginam ; the latter being retained by closing the orifice with a cloth. This double application of the remedy was repeated to the third time, when unequivocal evidences of its effects showed themselves ; the face became pale and cold, tremor of the extremities with a small feeble pulse ; anxiety at the præcordia with efforts to vomit ; soon followed by powerful vomiting and a gradual opening of the jaws. This seemed to break the charm, for although she had many slight returns of the trismus, yet not exceeding a few hours, and this without any tetanus. Large and repeated dejections of the earthy matter now took place in rapid succession, and she gradually recovered from every symptom of tetanus and has continued exempt from any return of that disease, with a few slight exceptions, to the present time. She has had a number of dejections of earthy matter in small quantities since convalescence from that attack ; but she has now been free from every thing of the kind for nearly a year. The tumor in the hypogastric region has also disappeared with most of those distressing pains in that part. Menstruation irregular in period but better in quality—the limosis pica is occasionally troublesome —the general health is feeble ; but she feels freed from the burden which so long incommoded her by its weight. She is much afflicted with swelling of the left mamma and soreness of the integuments of the thorax, and frequent hæmoptysis and cough, with pains in the right side of the thorax ; but all these are much better than they were nine months past.

These complaints of the chest continued to afflict her for about a year and a half, and for a considerable time they assumed so serious an aspect that her recovery was thought to be extremely doubtful. For about six months of this period she was afflicted with abscesses of the lungs, during which she had repeated and large quantities of purulent matter at intervals of two, three, four and five, and sometimes six or eight weeks.

This affection was ultimately subdued by a course of local and general bleeding, blistering, tartar emetic ointment, and

seton, with the internal use of the inhalation of the vapor of spts. turpentine, frequently repeated and long continued use of small quantities of a solution of tartrate of antimony, and small quantities of calomel to the production of a moderate degree of ptyalism, and occasionally repeated emetics of a solution of sulphate of copper. She has since returned home to the western part of New-Hampshire.—Within a year I have learnt from her that she has continued to enjoy comfortable health and has had no returns of the tetanic or trismatic affection or the discharge of earthy matter.

From the facts in this case and from analogy it would seem almost certain that a large accumulation of earthy matter took place in some portion of the intestinal canal, most probably the head of the colon ; and became occluded from the common canal, and ulceration having opened a passage into some portion of the uterine canal, it made its exit by this opening. The discharge of purulent matter per anum et vaginam, immediately preceding the appearance of any clay, seems the only clue to an explanation of this curious phenomenon.

Kennebunk, Aug. 28, 1828.

Case of Duodeno—Hepatic Abscess.

BY DR. JOHN BARKER.

In 1816, Mr. Solomon Butterfield, the subject of the following remarks, had typhus fever.—After that time he was supposed to be laboring under chronic inflammation of the stomach, which was much more distressing and troublesome in the cold seasons of the year. In the winter he was able to retain but very little solid food on his stomach ; the mildest liquids frequently caused great distress and would be thrown up. He made application to several physicians and a number of quacks, but received very little benefit from any, and was manifestly injured by some. Having been his family physician, I had occasionally seen and made prescriptions for him.

In January, 1833, I was requested to visit him; I learned that his bowels had been closed five days—that he had been vomiting about twenty-four hours and for the last three or four he had been constantly hiccoughing. There was unusual fulness of the epigastric region, which was extremely tender and painful. By the use of warm and soothing applications to the stomach externally, opium internally, followed by enemas, the vomiting and hiccoughs ceased. The acute pain and tenderness of the part abated, but it was never after wholly free from some uneasiness. The bowels, which were before very inactive, now became more so. The alvine discharges were variable; sometimes very dark, but for the greatest part of the time of a clay color.—His flesh and strength gradually lessened—but on his most comfortable days he was able to walk some rods from his house until the day before he died.—He had frequent attacks, like the one above described, of vomiting and hiccoughing, and was relieved by the same means, until the last attack, on the 12th of July, when he suddenly expired, being about 58 years old.

Post mortem examination.—In external appearance—much emaciated; skin natural.—An incision was made vertically on the sternum and abdomen, crossed by another at the epigastrium; sternum raised; lungs externally greyish, many carbonized specks; right lung adhering to the pleura by bars and lymph; base strongly adhering to the diaphragm; left lung contracted; right one less so, with some fulness and unyielding of the upper and back parts; structure dense, somewhat indurated; about eight ounces of purulent fluid in the cavity of the chest, mostly in the right side; heart pale, slightly yellowish and flabby, nothing else in change of structure or otherwise, to excite attention; abdomen and omentum slightly covered with a yellowish serum; intestines of a dingy yellowish color, some appearance of inflammation in several small spots on the ilium. The pyloric end of the stomach and first portion of the duodenum, with the investing membranes, were drawn up into one mass near the ductus hepaticus and attached to the liver. Expecting to find the gall-bladder in the neighbourhood, the mass was carefully dissected round without finding the object of our search.

In the course of the operation, however, on separating the parts by the finger and back of the knife, a sac was ruptured, the coats of which apparently formed a connection between the pyloric orifice and the liver. About one ounce of rice colored muco-purulent matter was discharged, together with a *small stone* about the size of a large sugar pea, or an English cherry stone. On subjecting this stone to examination, we were well satisfied that it must have been swallowed, it having the external appearance of a common stone. There was a small speck or two of mica on its surface, and two minute chrystals of schorl, the remainder was common silicious quartz.

The internal surface of the sac presented a smooth coat of condensed membrane; in the upper end the open mouth of the ductus hepaticus about the size of a goose quill, even with the surface of the liver. The lower side of the sac communicated by an opening with the stomach and duodenum. No trace of the ductus communus cholidochus could be found, as we did not fail to examine minutely for that purpose.

There was but little change of structure in the pyloric portion of the stomach; perhaps a little harder than usual. On laying open the stomach, two or three ounces of muco-purulent matter was discharged, precisely like that of the contents of the sac just described. Immediately before the entrance to the pyloris, on the inside of the stomach, we found a small dish or saucer-like depression, about the circumference of a ninepence; edges smooth and inverted; surface like condensed membrane. This no doubt was the seat of a stomach bile or abscess, which had long since been cured by discharge of its contents.

From the circumstance that the matter contained in the stomach exhibited the same appearance as that in the sac, and there being a communication between them; and also taking into consideration the appearance of there having been an abscess in the stomach, may we not draw the inference that the stone found in the sac of matter was previously swallowed by accident or design, which caused inflammation, and thereby became impacted, and passing along the pyloris, at length became entangled, keeping up the inflammation and consequent adhe-

sion, and finally made its way upwards towards the liver, involving certain parts in the consequences; suppuration of some, and obliteration of others.

Another circumstance not a little peculiar is, that although the ductus hepaticus opened freely into this sac of matter, yet its contents were not in the least tinged with bile, and there was no reason to suppose that the liver was not capable of secreting bile, during the whole progress of this disease, as there was no evident derangement of its structure.—This is more particularly worthy of notice, as it may help to explain some other pathological facts. It has been said that bile has in some cases ceased to flow through the ductus communis cholidochus, although there was no want of bile in the gall cyst, or apparent obstruction in the duct: Hence spasm, a too convenient term in use, is brought to our aid to explain causes otherwise inexplicable.

It is no doubt a fact, that there are many instances in which the canals of the system may fail to perform their usual office, and yet we may not be able to discover any obstruction. Neither perhaps, has spasm ever existed; or if it had, it would hardly account for so long and total obstruction, as may often exist in the ductus communis.

It may therefore be supposed, that instead of an existing vis-insita, (which there must be, in order to produce spasm, in consequence of irritation,) that there is on the contrary a *loss* of the *vis-insita;* of course a palsy or atony (or whatever else we may please to call it) takes place and the vessel falls into a state of collapse, loses its power to propel or convey its fluids, or in any manner perform its accustomed functions.

Wilton, August, 1833.

P. S.—Since the foregoing was written, it has been ascertained that small stones were prescribed by one of his medical advisers; and although it was unknown to the writer of this sketch, he had been in the habit of taking them to assist his digestion. It is believed, however, that he had taken none for a long time previous to his death.

Medullary Sarcoma or Encepheloid Tumors.

BY DR. JAMES BATES.

Although it may not be easy to account for the more lasting and advantageous impressions, left on the mind of a physician by the faithful detail of cases, than by theorising and general observations, I imagine the fact will be acknowledged by all men of experience in the medical profession.

Believing that the nature and extent of my practice in the last twenty years has brought under my observation a very large share of tumors of nearly every kind, which afflict the human body, I have thought it might be useful to detail a history of some of them, with a view to encourage investigation, and to draw forth communications from others, which shall place them more under the control of art, than has hitherto been the case, at least so far as I am acquainted.

I have selected for this communication the class of tumors named at the head of this article, not because I can give any new views of a successful treatment, but because I have met with no diseases which have more completely baffled every effort and every hope of myself and friends, and also with the hope of eliciting from others a history of a more successful and satisfactory mode of treatment.

CASE I.

Aug. 15, 1820.—Hannah Abbot, aged 28 years, an unmarried female, came under my care on account of a large tumor on the left side, in a line with the umbilicus and about four inches from it.—Its external appearance was about as large as a pint bowl inverted—its feel was round, but not smooth, apparently preserving the same convexity within as without.—It had become so excessively painful as to render life a burden; whether much of this was owing to distention I know not.—I had never seen so much pain in a tumor, unless confined by fascia.

Her general health had suffered much, as the disease had existed nearly a year since discovered, and had then acquired some considerable size.—She sought relief by any means

we would advise; and in consultation with my friend Doctor *James Bowen*, it was agreed to attempt the excision of the tumor, which was done as carefully as the nature of the operation *seemed* to admit.—In cutting round it the enveloping membrane (for it ought not to be called a sac) was cut through, and much of its contents rolled out.—It was found so difficult to separate its lower surface from the peritonæum, that some small patches were left. It had bled most profusely until the volume of the tumor was rolled off, when the hæmorrhage became manageable.

The parts were brought together and confined by ligatures, plasters, compress and bandage, and *seemed* quite well in a few days.—Having expressed an opinion to *Doctor Mann*, soon after, that the peritonæum was diseased; he rather inclined to doubt, from the known fact, that membranes often preserve their structure and healthy state, though in the immediate vicinity of diseased action.—I mention this particular, as it had an influence on a succeeding procedure in this case.

In December following, I was informed the tumor was as large and painful as ever.—I saw her on the 11th of Jan. 1821, and found the cicatrix expanded as much as two inches in width, and the tumor larger than before.—I advised a second operation, although I could give little hope to my patient of its success. She submitted; and, by the assistance of Dr. *F. Caldwell*, I dissected out the tumor with great care, and so intent was I to remove every vestige of the disease, that I accidentally made three small openings in the peritonæum. The wound was treated as before—and with the same success in healing, and same want of success in the event; as she had the disease return upon her again in a few months.—It became an open fungus ulcer. She lingered some time in great pain; and finally died from exhaustion.

The contents of both tumors were similar.—Composed of medullary areola of different sizes, from a pea to a pullet's egg.

CASE II.

May 23, 1822.—Mrs. Cleaveland, aged 40, the mother of a numerous family, came to me with a disease of the right hip

joint, which had been progressing for 18 months, and her physician had told her she had chronic rheumatism.

As she lived 16 miles from me, I advised rest, and a seton behind and below the trochanter major, it being more convenient for the patient to manage than an issue.—In July, she was placed under the immediate care of my ingenious friend, Doctor *Joseph Caldwell.*—About this time, a pulsating tumor was observed on the posterior part of the ilium, tense, painful and sore.—Almost every means, usually had recourse to in such cases, was tried,—both internally and externally.—Blue pill, Bark, Iron, Acids, Blisters, Moxa, Issues, &c. &c. In the course of several months this tumor diminished in size, and about the same time, one of a similar character made its appearance, in the inguinal region of the same side.

The pulsation and whizzing noise was such as to leave no doubt on my mind or those of five or six medical and surgical friends, among whom were Doctors *Mann* and *J. Prescott*, that there was an aneurism of the external iliac artery. On 19th July, 1823, in consultation with Doctor *Mann* and other professional gentlemen, finding our patient almost exhausted with pain, watching and hectic, it was determined to tie the artery ; more especially as the peculiar whizzing, so well known to the surgeon and so difficult to describe, (usually, or at least frequently attendant on aneurism,) was most distinct in this case.

Having the assistance of my medical friends, with rather an *unsteady hand*, I proceeded to perform the operation, which, owing to the emaciation of my patient, was more readily done, than I had anticipated.—I had not, nor do I know that any surgeon in this State had, performed this operation at that time ; and I confess it was approached on my part with a kind of dread.—The pulsation and whizzing ceased, the pain abated, the limb became some cooler than the other.—When the ligature came away, there was an alarming hemorrhage ; but, owing probably to the weakness of the circulation, it was arrested by compression and did not return.—It was not, in all probability, from the main trunk of the artery.—The wound appeared healthy much of the time, although not healed for three or four weeks : Our patient was more comfortable, however, for a time, and before five weeks the opening had closed entirely.—But about this time she sunk under accumulated disease and debility.

Dissection.—A great part of the ilium of that side was carious; and all the soft parts in the tumor, which was still undiminished, were medullary, cheesy and fungus,—and to our surprise no anuerism existed or ever did exist in the case.—The artery preserved its integrity, although obliterated below the ligature, through all this mass of semi-disorganized matter.

It seems to me probable, that the bone was diseased in a pretty early stage of the complaint, and, if I am not deceived, many cases of encepheloid disease and fungus hæmatodes have, at some time, diseased bone.—The mistake which happened in this case, I mention with less regret, since M. Lisfranc, as late as 1827, was deceived in a similar manner. He tied the left carotid for a pulsating tumor under the ear, and notwithstanding he had great apprehension of hæmorrhage, and actually had it, it was from a very different source from the one apprehended.—It was from the tumor, which proved (as he feared and cautioned his class at the time,) a fungus hæmatodes, which he frankly declares, he is not always able to detect when the tumor lies over, and receives motion from, a great artery.—Some may think, and probably not without reason, that I have classed this disease incorrectly. It may be found, however, much more difficult to class diseases at the bedside, than in the closet.

CASE III.

December, 1824.—Samuel Tibbets, a fair, healthy, temperate man, aged 28,—was carrying a stick of timber with another man, who threw off his end without giving notice, and caused considerable contusion on the right shoulder.—It soon ceased to attract notice and was thought nothing of, till the spring of 1825; when a small tumor occupying the triangular space between the clavicle and scapula, was observed, with pain and uneasiness. But so slow and almost imperceptible was its progress, that no alarm was occasioned till the spring of 1826; when, and during the summer, it increased to the size of a goose egg and became livid and rather soft: or at least, of a doughy feel, at its upper part—when a professional gentleman at Bangor, opened it. No matter, except a bloody serum, was evacuated and that in a small quantity.

In November, I visited the patient, who lived a distance of forty miles from me, and found a tumor six inches in height, nearly as regular and almost exactly of the shape of a common tin quart measure; ulcerated at the top, and in a few places on the sides, from the irritation of matter lodging on the skin; as were also, a few places on the healthy skin, a short distance from the base of the tumor.

The tumor had a leaden hue, except at the most depending part, (wherever that might be, from the position of the patient,) which was dark purple.—The pain was heavy and dull—the patient's health was much impaired, but he could sit up some part of the time.—The day before I saw it, a pound and a half of blood was discharged from a small ulcer in the side, in a small stream, and was taken in a dish.

I was satisfied of the danger from such a disease, and had only to say, "as it is, you will probably soon die of hæmorrhage: and if the tumor should be removed, you will probably not live long. As there may be however a possibility of benefit from an operation, I will give you that chance, if your physician, your friends, or yourself wish it."

It was decided that a removal should be attempted.—As soon as I had encircled the base of the tumor, I could push it off with the hand, and then proceeded to dissect it out, which seemed to run deeper than was supposed. On exposing the clavicle, it was twice as large as in health, and so soft I could cut it with the knife, to some depth.—I followed the disease to the posterior and inferior edge of that bone, and did not yet arrive at healthy parts. I removed as much of the tumor as I dared from the triangular space, and on the upper edge of the scapula; but was sensible much still remained.—I did not remove the clavicle, because I was not prepared to do it, and if I had been, the exhausted state of my patient, and my convictions at the time, that no benefit could result from it, would have deterred me from doing so.* The wound was seven inches in diameter in any direction. Adhesive straps were ap-

* Dr. Mott of New York has since done this in a similar case.—See Journal of Med. Sciences.

plied to approximate its edges as much as possible, and common bandaging.

To my utter surprise, when I visited that town in February, he came two miles to see me. A tumor three inches in diameter, and elevated above the surrounding parts about one inch, was what remained—his health was much improved—he had been using caustics of various kinds, but could not diminish the volume of the tumor.—I advised to cut the tumor to a level with the sound skin at one stroke of the knife, and apply the actual cautery thoroughly, which was done.—The bleeding was violent for a moment, but soon subsided.—I invited him home with me, and having him near by, I applied the hot iron, as occasion seemed to require, usually once in three or four days; and tried those internal means commonly recommended in the constitutional treatment of local diseases, since Mr. Abernethy wrote on that subject.—The clavicle was soon in sight, apparently *vegetating* bony spiculæ about as fast in proportion as the soft parts threw out medullary matter.—This *last* would so change the structure as to leave walls of healthy muscle, and form tubes into which the finger could be passed in various directions, displacing the soft mass as it entered.—Blood would flow violently for a minute, but was easily staunched by a plug of lint or soft tow.—Most of the clavicle was removed in small pieces at a time, as he could neither bear the pain or loss of blood to have more done at once.—The disease slowly progressed towards the lungs, and symptoms of hectic increased with the return of warm weather, when I advised him to return to his friends. He was carried home on a litter in June, and lingered till October, when he died.

A finer and a better man for his station in life, I never saw: and although from the necessity of the case, I attended him almost daily for four months, without even the hope of pecuniary reward, the pleasing recollection of his many good qualities, will nigh compensate for the labor bestowed.

The body of this tumor when examined, exhibited the most perfect case of Medullary Sarcoma, I have ever seen.—Although much of the growth afterwards was healthy, still this same change was going on, and approaching his vitals in other

directions.—In the course of treatment, almost every caustic and stiptic known to me was used.—He always preferred the actual cautery, as least painful, especially if the iron was white hot.

The tumor when cut away weighed 3½ lbs.

CASE IV.

Cordelia Benson, aged 16, menstruated from fourteen to fifteen, but not so freely as she ought, after the first time.—This evacuation diminished gradually till April, 1827, when it ceased.—In February preceding, a tumor with pain was discovered in the right ham, apparently attached to the upper end of the tibia.—In July, Dr. J. A. Barnard was called and prescribed some constitutional remedies. He says the tumor was nearly as large as the hand, filling the whole popliteal cavity. He soon became convinced from the pain and feel of the disease, that the loss of the limb, afforded the only chance of safety to the life of the patient.—This gave offence and he was dismissed. —In Sept. Dr. Thomas Flint was called, who gave assurances of a speedy cure.—He applied his medicated poultices and nostrums, till October. He then pronounced it "ripe for opening," and plunged his lancet into it, but no matter would come at his bidding. He then said "the bone was affected, and it must have time to clear itself."—The opening became enlarged, reverted the skin, and on Dec. 14th, when I saw it, it measured around the calf 19½ inches, not including the ulcerated prominence, which was as large as an inverted coffee cup.—She was hectic and in a state of extreme exhaustion, but the countenance still preserved some animation. The sore was extremely offensive, and at times attended with heavy pain. Appetite nearly gone.

I advised amputation as the only course which could promise any benefit. The limb was amputated about the middle of the thigh, which there appeared free from disease, and its circumference only 10 inches. The operation was performed in twenty seconds, with the catlin, as advised by Lisfranc and Liston. The patient had no untoward symptom, until the stump was healed, which, however, took place rather slowly. Toward

spring she began to fail, and by almost total neglect, (she being a town charge who had been quite expensive already,) she passed silently to her grave, with scarcely any medical attendance whatever, about 7 months from the operation.

Owing to the *whim* of an ignorant mother, too strong to be overcome by physicians and friends, this limb could not be examined. The fact, therefore, of its being *Medullary*, must rest on the judgment of those who saw it, and its history.

CASE V.

January 17, 1828.—I was called to visit Mrs. Olive Anne Jordan, of Dexter, aged 25; the mother of two children, the youngest six or eight months old:—Has had at times for four years past, pain just above the inside of the right knee. In April last, without any apparent cause, she was attacked with most excruciating pain in that part, and was obliged to take her bed for the day.

It continued about twenty-four hours: She thinks it was a little swollen at the time.—A tumor began to form about four inches above the knee on the inside. In September, it had acquired considerable size; when she was attacked, whilst washing her dishes, much as in April, and was in agony twelve hours. From that time, the pain had been heavy, but not acute. The tumor had constantly increased, and her general health as steadily diminished.—A Dr. F. for six weeks applied blisters and blue ointment, with calomel internally to salivation—the progress was in no way arrested, and the disease was fast approaching the hip, or rather groin, and would soon place the removal of the limb out of the question.—I advised amputation, which was agreed to, and our patient was anxious that no delay should take place, so well did she understand her danger.

Measure of the tumor compared with the sound limb—

Circumference of well limb,	13 inches.
Lateral diameter of do.	$3\frac{3}{4}$ "
Circum. diseased limb,	18 "
Lateral diam. of do.	$5\frac{1}{2}$ "
Length of tumor,	9 "

commencing fairly above the lower epiphesis of the femur. It

formed three-fourths of the circumference of the limb,—it was quite firm to the feel, but not without pulsation; and painful on pressure.—The constant sensation she expressed, as "a sense of great weight."—At the point where the pain was felt in April and Sept. there was tenderness.—Her appetite diminished, countenance pale, pulse eighty-five, rest irregular, had lost some weight.—Bowels require laxatives. The tumor so completely enveloped all the great vessels and nerves of the limb as to preclude the possibility of extirpation without the loss of the limb.—She had been fortunate as I conceive, in not having more done for her, as any opening made in the tumor at an early period would undoubtedly have put a cure out of the question.

The limb was removed on the 22d in the manner mentioned in the former case, except in one particular, the artery was tied before sawing the bone.—[I should mention in this place, although it may have little connection with the subject, that as yet, in amputations, I have not dispensed with the use of the tournequet, because in country practice, I dare not trust the assistant usually at hand, to make the requisite pressure on the vessel, without it.—I hope also to be pardoned for saying a word on the mode of using this instrument which would have been useful to me, when a young man, and possibly may be to others.—Surgeons advise us to screw down the instrument rapidly, that no blood may pass down in the artery, after the veins are compressed. Very few, if any of them, tell us to unscrew it rapidly and totally: I have seen much blood lost several years ago, by a moderate pressure remaining on the veins when the action of the artery was left free *after it was tied.*]—On the eighth day the dressings were removed by my brother and the parts were completely adhered, except at the exit of the ligatures.—On the 11th a violent hæmorrhage came on without the ligature coming away, which did us much injury, as it burst up the adhesions extensively.—It had two or three more bleedings, and then suppurated at that point and healed kindly.

I attribute this accident to my using of late, in several operations, a solution of alum, by the advice of Dr. Anthony of Augusta, Georgia; ***but shall not again,*** as I imagine, the small

arteries, which should have been tied at the time, had their bleeding arrested in a manner not sufficiently secure.—She was extremely weak after this loss of blood, but slowly gained strength. —In April she had a run of fever, as I have been informed by her friends.—Since which, her health has been pretty good.

Examination of Tumor.—It was laid open the whole length to the bone, which was perfectly healthy.—On cutting through the cellular covering natural to the limb, we came to a substance covering the whole of the diseased structure, in appearance like that part of a cow's udder in which is some admixture of fat: Its internal surface was very uneven, forming numerous cavities of different sizes, mostly filled with medullary matter—two as large as hen's eggs were filled with a fluid of the color and consistence of tar; there were three irregular, oblong pieces of coagulated lymph about the size of the finger.—I am not able to say, if the femoral artery might or might not be traced, as the limb was not injected and the natural parts much displaced or their structure changed.

My notes do not enable me to state all the minute circumstances and pathological facts which would be requisite in writing a systematic work—my only object being to invite attention to the most prominent features of these cases, for the purpose of exciting inquiry, and also to urge the *early* removal of the whole disease, before the morbid change in the system renders the attempt useless or nearly so.—I have seen three cases of diseased ovaria, much of the increased size of which, was owing to medullary matter.—One had in addition to this, hair, bone, teeth and cheesy matter, and weighed thirteen pounds.

I have once seen this medullary kind of disease on an ox, which probably would have proved fatal, if a shorter method of terminating his sufferings had not been resorted to.

Norridgewock, Oct. 1833.

Bronchotomy.

BY DR. J. PRESCOTT, OF FARMINGTON.

Operations for removing extraneous substances from the trachea, when lodged there by accident, are becoming more frequent in this country than formerly. Children, who for the most part have been the subjects of accidents requiring such operations, have usually been abandoned to the varying circumstances of mere chance for recovery, and suffered to linger through an uncertain period of distress, and of painful suspense to their friends.

The following cases and facts upon this subject, are not reported with the expectation of communicating any thing new to the faculty, but with the hope of inspiring *more confidence* in the success of an operation, which, by the practical surgeon, ought to be contemplated with feelings of less regret, than he would be likely to experience from beholding his patient expire by suffocation; and that too in consequence of his neglect to exercise mere ordinary skill and fortitude.

A child three years old, in the act of masticating some parched coffee, was suddenly seized with a violent fit of coughing, accompanied at first, with appearances of immediate suffocacation. This state, however, was soon succeeded by a more natural and easy respiration. At uncertain and irregular intervals, the coughing and sense of suffocation was renewed, and sometimes continued for several hours together, especially during the latter part of the night. The child occasionally appeared playful and manifested no signs of indisposition. So remarkable was the intermission of these symptoms, about the fifth and sixth days from the accident, that the parents flattered themselves no danger existed. But it returned, and at the end of ten days, medical advice was requested. The nature of the indisposition could not be mistaken. The apprehensions excited by a history of the circumstances and symptoms, were strongly corroborated by the aid of auscultation. By placing the ear near the trachea of the child, during a fit of coughing, a distinct rattling sound was perfectly manifest, such as might naturally

be supposed, from some hard loose substance, within the cartilaginous air tube, when put in violent motion by the convulsive and reiterated efforts of the respiratory organs to repel it. The operation of Bronchotomy was immediately decided upon and completed with success, by the able assistance of Dr. *David H. Raymond* of Milburn. The place selected for opening the trachea, was the space betwixt the thyroid cartilage and the isthmus of the thyroid gland.

Now, every practical surgeon is liable to experience some degree of disappointment and mortification in attempting any new operation, while depending wholly upon the experience and direction of others. It is often much easier, in our profession, to talk learnedly and accurately describe operations we have never seen, than to test our skill by an easy and successful performance. An operation performed upon a dead subject, which lies passive and bloodless under the edge of the scalpel, will seem very different to that upon a living child, while writhing under the smart of a knife, superadded to the apprehensions of fear, and uncontrolled either by reason or discretion. The truth is, children from the age of eight or ten months to three or four years old, are principally the subjects of this operation. An age which requires every thing of this kind to be done by coercion. The trachea of children at this age, either above or below the thyroid gland, is not so accessible nor of the length as we seem to make it, by books and conversation. Their necks are almost always comparatively short, and covered with much fat. Under all these circumstances, can we, in every case, with ease and certainty, prosecute a slow and deliberate dissection, by putting aside this vein and avoiding that? Rather do not the uncontrolable efforts of the child, which serve to increase the flow of blood even from small veins, tend also to aggravate the suffocation, from the almost tight closing up of the very sensible glottis, and require the cutting part to be done in as little time as possible?

In the present case, after the incision was made through the integuments, time was allowed for the bleeding of a divided vein to subside, but without the least benefit. As soon as it was again touched, the constriction of the neighboring muscles

from voluntary efforts, kept the wound full of blood in despite of sponging. Indeed, the fear of a small quantity of blood dropping into the windpipe, from a wound of this kind is altogether idle. It is instantly thrown out and without the least detriment to the patient.

There are ordinarily no vessels to be encountered here that would be attended with any danger, unless the operation be very protracted. No more blood would be lost than what would be required to counteract the inflammation consequent to the excessive irritation, in such cases, upon a delicate mucous membrane. And from inflammation only could danger be apprehended, after the offending substance shall have been removed.

Instead, therefore, of regarding the venous discharge of blood, as advised by some writers, no time should be lost in waiting, but the operation immediately completed, as it was in this case in the following manner.—The child being held across the right knee and arm of an assistant, its shoulders and neck supported by a pillow, the head held firmly back by a second person, so as to straiten the muscles and common integuments upon the fore part of the neck. The forefinger of the operator, by feeling, (for it could not be seen through the thick cellular substance over it,) was placed upon the prominent point of the thyroid cartilage. The point of the scalpel was dropped in immediately below it, precisely in the centre and dividing the cellular membrane downward, by the judgment, to the superior margin of the thyroid gland. The incision being about one and a half inch in length in the skin. Keeping the same boundaries in view, the second incision was carried down to the trachea. The forefinger was then dropped into the wound, so that the nail encountered the upper and anterior margin of the cricoid ring. The point of the knife was then entered in the small space betwixt the two cartilages, so as to avoid the small arteries above, (the finger nail being still a good director,) with a firm and steady motion, the knife was then carried downward so as to divide the cricoid ring, and the loose space just below it. The child was then instantly raised up, and the head leaning a little forward, to suffer the blood to discharge itself from the wound. The blades of a small pocket-case forceps, were

then gently introduced just within the cartilage, and by opening them the parts were kept sufficiently asunder, to suffer any small substance to pass betwixt them. The coughing continued, and by the fourth or fifth expulsory effort, of the respiratory organs, the kernel of coffee was thrown out with much force, betwixt the blades of the forceps.—On raising the child up, the bleeding ceased with its struggles. The wound was lightly dressed with adhesive straps only. The cough continued several days, and repeatedly loosened the plasters, so that respiration was carried on through the wound. But by frequently adjusting them, it healed in about ten days, and the patient was soon well.

In that section of the State where I now reside, five other cases from this kind of accident within fifteen years have been related to me from sources entitled to credit, one only of which I had an opportunity to examine. Three of the children died within a few days from the accident, and two recovered without an operation. One of these came under my observation. It was an infant less than a year old. The child was able to crawl upon the floor and to stand up by the aid of a chair or other things.

It was taken suddenly ill, while playing at the till of a chest, and supposed to have convulsion fits, as the mother then termed it. It was brought to me for medical advice in 1817, soon after it became ill. While the mother was describing the fits and holding the child in her lap, which had for some time appeared playful, it coughed, became suddenly distressed, and appeared suffocated. The fit lasted a few minutes, and the child assumed its wonted activity. From the history of the case, and the appearance of the child at the time, I had no hesitation in giving an opinion, that something was lodged in the windpipe, and nothing but an operation could save it. The parents were not prepared for such a strange decision, and terrified at the idea of having the throat of her child laid open to save its life, the woman fled in affright.—I learnt afterwards that those paroxisms of suffocation were repeated, sometimes every day, sometimes once only in three or four days. After several months, however, its health appeared feeble, and its death was daily ex-

pected, as the fits had become more frequent and of longer duration. Nearly one year from the first attack, it had a swoon which continued longer than usual, and it was supposed to be dead. Unexpectedly it drew in its breath, followed by a sudden and powerful expiration, which threw a kernel of coffee from its mouth upon the floor. The child immediately recovered.

From all these facts, it is certain that a smooth substance of small size, may be lodged in the trachea for several months without fatal consequences, and thrown out again by an accident, the very reverse of that by which it got there.

No well informed physician, however, would willingly leave his own child to such a precarious recovery, in preference to the more certain and immediate relief by a timely operation.

Local Blood-letting.

BY DR. JAMES BATES.

Commanding facts, both in the natural and moral world, more certainly arrest the attention, than the small every day occurrences, which make up the far greater part of human concerns.—The earthquake and tornado in the natural, and murder, piracy and robbery in the moral world, occupy the foreground; whilst the "still small voice" of nature and nature's God passes unheeded. So in the profession of medicine and surgery, those diseases and injuries, which exhibit some astonishing and striking phenomena, affect the minds of professional writers and readers more powerfully than those great and numerous outlets of human life, by which are carried off nine tenths of our species. Familiarity with these have almost lost their due influence upon the mind, and hence they come to be regarded as the daily frequented path, with little concern or interest.

The object of this communication, is not to proclaim some new and important discovery; but what in my humble apprehension is of much more importance, in the treatment of diseases, to call the attention of my brethren to means already in use, and, as I conceive, much better known than practised.

Why it is, that a remedy, so universally acknowledged by members of the profession to be of the utmost importance, in the treatment of local inflammations, is so little resorted to, in *country* practice, is not at first sight easily accounted for.

So long ago, as 1811–12, the question of a substitute for leeches, during two years, was proposed for the Boylston prize. Possessing, as I imagined, some *mechanical* ingenuity, this subject was much reflected on, and actually became the subject of some experiments; not satisfactory indeed, but such as have had an important bearing on my use of local blood-letting in the treatment of diseases.—In fact, no satisfactory substitute was proposed. But the second year the prize was awarded to Dr. Waterhouse, Jr., for his essay on the Hyrudo, its varieties, treatment, &c.

At that time I commenced extracting blood from parts affording but small regular surfaces, by means of punctures and the common straight breast-pipe, with great advantage.—I even formed an opinion, which I have not yet found reason to change, that in treating acute diseases of the eye, this mode possessed several advantages over leeches.—1st, It is at hand at all seasons.—2d, It will always produce the evacuation, not being subject to the will of one of the most capricious of the animal creation.—3d, It produces much more congestion in the cellular tissue, which I believe is beneficial in retarding arterial action in an adjacent part.—4th, Many patients dread the application less.—5th, The amount of the evacuation is correctly ascertained.—6th, The abstraction is more rapid, and on that account much more beneficial.—To offset against all these advantages, we have the single circumstance of greater ease in the use of the leech.

The ease of using this homely apparatus, is much increased by melting sealing wax around the end so as to defend the lips from the glass. Several years since, the cupping glass with valve has come into notice, to be used in the same way as I used the breast-pipe. But, for some occasions, and on some accounts, it is a less eligible instrument.

However desirable it may be that every practitioner should be possessed of an ample cupping apparatus, I am sorry to be-

lieve that not one physician in ten in the State is so provided. It may be true that there are numbers of the faculty who are doing much good, and might do much more, who have never seen a good and full set of instruments for this purpose.

Those who are well acquainted and expert in this practice, will pardon me for being somewhat minute in my observations, that others may become familiar with what was once an awkward business to them likewise.

Of scarificators, three kinds are principally used.—1st, The old fashioned triangular points, driven directly through the skin by a powerful spring.—2d, With blades made like the German spring-lancet, and propelled in a similar manner.—3d and best, that which has fine cutting blades, made to perform half a circle by its spring, making the punctures *en passant*. This instrument has a gage screw to regulate the depth of the punctures.

Of glasses, there are various kinds.—1st, The old fashioned bell glass, of various sizes and shapes.—2d, The brass-mounted, with a membrane valve, to be used by the mouth, (a most convenient article for practitioners, whose business requires traveling on horseback.)—3d, A similar glass, with a screw to attach to the exhausting syringe.—4th, The brass-mounted, with a stopcock—the end fitted to enter the syringe closely without a screw.

The modes of exhausting the air from glasses, are very numerous.—First, by the mouth.—Secondly, by various modes of applying heat, either to consume or to rarify it; as by burning paper, tow, and with or without alcohol. Rarifying the air in a large tin cylinder or globe, affixed to the glass, by immersing it in hot water, and causing condensation by a sponge and cold water gradually applied.—An ingenious operator in Philadelphia, rarifies the air in a common bell glass by pasting hot sealing wax on its inside, and condenses by cooling as above, or otherwise.—Lastly, by the exhausting syringe, applied by a screw to the valve glass, or on the smooth pipe of the stopcock.

The modes by the mouth and the syringe are preferable to all others, because the exhaustion can be regulated to the pre-

cise point you find required ; and by being repeated from time to time, at the same application, the glass is *filled*, which never takes place in the other modes.—I am far from believing the negligence of any medical gentleman pardonable, who not being provided with the *best* apparatus, uses none at all.—If you have not all the means of giving relief you could *wish*, do not refuse to employ *such* as you have.—If nothing better is to be had, and your patient's case requires the remedy, make free scarifications, an inch in length, with your common lancet, and apply a tumbler, or any other vessel you have at hand. In whatever mode you operate, one application of the glass should always be made before you scarify.—It shows you whether you can certainly apply the glass to the part, so as to draw.—It shows also the circle, within which your punctures are to be made, and renders the part less sensitive.—The adept in cupping never commences his operation, without warm water and a sponge at hand.

Those who are, and those who are *not* conversant with local blood-letting, must be aware, that some parts bleed much more readily than others.—That some, in fact, will scarcely bleed at all. Although it were easy to name some or all of these, I might be thought to intrude on ground, which every practitioner is supposed to understand, and, if he does not, a few disappointments, at first, will do him no harm, however unpleasant it may be to his patient.

There are parts where leeches alone can be profitably employed; one, in particular, liable to the most fatal affections, which come to be treated; I allude to the abdomen. In acute inflammation of this cavity, the *displacement* caused by cupping, and the difficulty of procuring free discharge, counterbalances all the good you can do.—To the anus and other parts, similarly situated, leeches have no proper substitute.—Every systematic writer on diseases, directs local blood-letting, with as much *non chalance*, as though he supposed every practitioner as familiar with it, as with extracting a tooth or administering a bolus.—I would not insinuate that none are thus familiar with its use, but that so far as my acquaintance and information extend, there is a most unwarrantable supineness on this subject.

What circuit of ten miles, let me ask, cannot furnish cases of blind eyes, chronic pleuralgia, stiff or diseased joints—neuralgias, &c. &c. which might have been cured or benefited by the timely and faithful aid of this remedy? The whole country is covered with cases in which chronic inflammation, about, and emenating from the spine and nervous ganglia, is a prominent feature, and will baffle the skill of the wisest, until something comes in aid of blue pill and cathartic bitters.

Norridgewock, Oct. 1833.

[From the Medico-chirurgical Review, July, 1831.]

On the Treatment of Croup.

BY MR. GOODLAD.

A PAPER under the above title has recently been published in our new contemporary, the North of England Medical Journal, by a very judicious and able practitioner, Mr. Goodlad, of Bury, which we shall here give some account of, in order that the information contained in it may have as extensive a circulation as our Journal can give it.

Mr. Goodlad deems it unnecessary, of course, to detail the symptoms of croup, a disease which appears to be very prevalent in the district where he resides.

He confines himself, therefore, to a brief outline of the treatment, which, in his practice, has almost invariably been found efficient.

"In this complaint," says he, "every gradation may be traced (by placing the ear within a short distance of the patient's chest) from the brazen-like sonorous cough, to the gentle stridule heard more faintly as the patient approaches to convalescence, *and is able to draw a full and slow inspiration.* On the other hand, if there be rattling conjoined with a disposition to sleep, pale or livid lips, and cold extremities, effusion has taken place—death must follow, and will be accelerated by the remedial means we should otherwise employ. But so long as that

attack is accompanied with a high sounding cough, without rattling, the mischief, whatever it may be, is not irremediable; I would go much further, and declare it ought to be arrested, and feel a perfect conviction, in the majority of cases, that it may."

We think that Mr. Goodlad would be more accurate in his diagnosis of the actual state of things, if he put his ear in direct contact with the thoracic parieties; for assuredly he would thus become better acquainted with the natural morbid sounds in the aerial tubes.

Mr. Goodlad observes that there are instances on record where death took place in croup, and where no effusion could be observed —facts which militated in favor of spasm, and probably prevented active treatment. Such instances are, no doubt, rare.

"Amongst the poorer classes in Lancashire, who seldom call in assistance for croup, until all chance of recovery is destroyed, I have never yet seen a case terminate fatally, without an effusion in the bronchia being conspicuous several hours before death; and I am much disposed to attribute such an event, where it has happened, to the remedies made use of, rather than consider it a natural termination of the disease; particularly as some of those commonly in use are well calculated to produce it.

Amongst these the warm-bath is one of the most active, and, at the same time, most injurious; and I cannot imagine how any one, who has once witnessed its effects, can again recommend it in croup. It is, in my opinion, so decidedly hurtful, by quickening the circulation, that I should interdict its use in almost all inflammatory cases. The warm-bath, I think, is never useful unless prolonged until faintness is produced; and in the early stages of inflammatory complaints, it is often impossible to produce this effect, until the heart beats more than 130 times in a minute, which is a degree of excitement I think unwarrantable. If resorted to later, effusion is brought on sooner than it would otherwise supervene; and many practitioners could, I think, call to mind cases, where its use has been followed by unexpected death; the vessels previously emptied perhaps by bleeding, having given way, and apoplexy supervened."

We have had numerous opportunities of witnessing the injurious effects of inconsiderate recourse to the warm-bath in inflammatory affections; and we, therefore, recommend to the attention of practitioners the foregoing observations of Mr. Goodlad.

Emetics are condemned by our author, and not without reason, as a general remedy in croup. Nauseating doses of emetic tartar are considered as doubtful remedies in the same disease. Blisters in the neighborhood of the trachea were found to be injurious in the early stages of croup. A heated and close atmosphere in the room of the patient is decidedly injurious.

"From what has already been said, it is evident that two indications are necessary to be attended to, in the cure of croup; the first is to subdue the inflammation of the windpipe, the other to relieve the oppressed circulation. Without the first object be attained no means will avail; nor will it in every case be safe to wait until that can be accomplished before we relieve the system at large. Danger may be imminent from either of these causes, and we have often to determine whence it is most so, and to regulate our practice accordingly.

"The causes which produce croup, its symptoms and progress, alike indicate the necessity of blood-letting, and this remedy, in comparison with which all others sink into insignificance, should be immediately resorted to. Any quantity of blood may be drawn by leeches, and the local complaint, in almost all cases, be subdued by them; for if one crop of leeches do not remove it others must follow, until the breathing becomes free, or the child so faint, that further depletion would be unsafe. This mode of taking blood, by emptying the vessels which are inflamed, will, it is evident, afford relief, with least expense to the constitution: but when the complaint has existed many hours, and the jugular vein becomes alternately distended and collapsed, during each inspiration; when the angles of the mouth are drawn downwards, every muscle of the neck brought into action, and the breathing consists of a series of gaspings, there will not be time afforded for leeches, and not a moment must be lost. The external jugular vein should be immediately opened with the lancet, though this operation is sometimes exceedingly difficult,

requiring a quick eye and a prompt hand to catch it between each inspiration. The struggles of the patient, and the great contraction of the muscles, add to this difficulty: but no consideration should deter us from giving instant relief, and no other method of taking blood seems to afford the same immediate benefit both to the head and breathing. The child may be on the brink of effusion, and every minute lost is matter of serious reproach; but this urgency of the case, which, if not attended to, will speedily be followed by stupor, and that loss of sensibility over the whole frame so favorable to effusion, renders additional precaution necessary; for if the depletion be carried too far, or the vessels emptied very suddenly, that event, so much to be dreaded, will be accelerated.

"The finger should therefore be kept upon the pulse whilst the blood is flowing, and the further flow of blood prevented, if the breathing be properly relieved, before faintness is induced. It is safer to trust the further treatment of the case to leeches, which are indeed often necessary even when the jugular vein has been opened, and the loss of blood carried for the time to the greatest extent. This will not be matter of surprise, when we consider how little connection there is between the arteries ramified upon the inner surface of the windpipe, and the external jugular vein. It is safest, therefore, to unload the general circulation, where that is requisite, from the system at large; and treat the local complaints with leeches where they can be easily obtained; but if not, the finger may be placed upon the orifice for a short time, when the breathing is relieved: and another and a smaller quantity of blood be taken from the same orifice, until faintness deter us from proceeding further."

Mr. Goodlad generally directs leeches to the lower part of the trachea, below the larynx, because they bleed quite as well as on the upper part of the tube, and the blood is thus drawn from those vessels that have most recently taken on morbid action. In whatever way blood be taken, faintness must be induced, and *kept up for some time.*

"It is now that the ear of the practitioner will be most useful to him, and the sound of the cough, the noise which is made by the air passing through the inflamed part, and the frequency

and freedom of the inspirations must be closely attended to. He should never leave the bedside of the patient until he is satisfied on every one of those points, since he cannot do so with safety, or consistently with that duty we all owe, where the life of a fellow creature is at issue. By and by, he will be rewarded by hearing the cough alter its tone, it becomes loosened, there is a little expectoration, and the child is safe."

A stridule, Mr. Goodlad observes, will remain after the respiration has become free ; and neither this symptom nor the high-sounding cough afford sufficient reason for more leeching, yet the long continuance of either of them is an object of suspicion, and *unless the inspiration be free, full, and slow*, we may be assured that inflammation is not entirely removed.

Croup is no doubt an idiophatic disease in many cases, but in the majority, and in the most severe instances, it is accompanied, if not produced, by dentition, together with determination to the head, and a disposition to effusion there. The state of the gums ought, therefore, to be examined in all cases; and they should be freely lanced if they shew heat or thickness in any part. The bowels are to be opened by castor oil or jalap and calomel. The only other medicine which Mr. Goodlad is in the habit of giving is calomel and opium, in large and frequent doses. This combination, before the loss of blood, would be injurious ; but after that measure, when the head is free, and the breathing quiet, it produces the best effects. It induces sleep, appeases the cough, determines to the surface, and prevents reaction ; whilst the calomel acts here, as in iritis, by preventing effusion and producing absorption.

" Another advantage arising from the combination of opium is, that it enables us to give a larger quantity of calomel, than would be otherwise practicable without its passing off by the bowels ; and as the glandular system in children is seldom affected by it, and ptyalism, therefore, rarely induced, we need not be deterred from giving it largely, and have occasion only to watch its operation on the bowels."

Several cases are detailed by Mr. Goodlad in illustration, but the precepts of treatment are so clearly laid down, that we deem it unnecessary to quote any of them in this place. Mr. Goodlad is evidently a decided and judicious practitioner.

[From the Medico-chirurgical Review, July, 1832.]

Memoir on Chlorotic Diseases.

Dr. Bland thinks that medical men have always taken far too circumscribed a view of these diseases, by considering them simply as symptoms, or as the signal and result of amenorrhœa. "Do we not," says he, "observe them at all periods of life, in the male as well as in the female sex, occurring too, even although the catamenia are regular; disappearing by the use of proper remedies, although this discharge remains obstructed? The real and specific cause of chlorosis, under all its Protean forms, is a vicious and imperfect sanguification; the blood being defective in crassamentum and coloring matter, and in consequence becoming less capable of imparting functional energy to the body. Four weighty reasons are adduced in proof of this doctrine. 1. Chlorotic maladies are almost always brought on either by whatever interferes with, or deranges the assimulation of the food and its conversion into the "pabulum sanguinis," as by living on unwholesome and innutritious food, or by breathing a corrupted atmosphere, &c.; or secondly, by whatever enfeebles the system of the ganglionic nerves, which, we know, regulate and keep in health the organ destined to form and to circulate the blood; such as all depressing emotions of the mind, masturbation, excess of venery, sedentary employments, &c. 2. The doughy, waxy whiteness of the skin, the pale lips and gums, the scanty and serious discharges from the vagina, nose, &c. and the watery state of the blood when drawn, all indicate the real nature of the disease, whose progress, 3d, is denoted by an utter want of power and activity in the organic functions of the body, arising no doubt from a deterioration of the fluid, wherein, it is said, that life resides. 4th. The efficacy of steel medicines, which have the power of restoring to the blood the "excitative" properties which it has lost, and which chiefly depend on its coloring matter.

So varied and so unsteady is the occurrence of symptoms in chlorosis, that it is almost impossible to define its characters

within a single description. Sometimes the "anæmial" state of the skin, with slight general languor, are its only obvious characters; in some cases is added a lingering and wasting fever, which is not unfrequently attributed to visceral disease; in other examples, are intractable gastrodynia, not to be relieved by ordinary remedies; an asthma which defies all antispasmodics; a general tumefaction of the abdomen, and anasarcous state of the lower limbs; a restlessness and want of sleep, with, or without excruciating headachs, and murmuring noises in the head against which depletion and counter-irritants are so commonly and so perniciously prescribed; or lastly, symptoms of diseased heart, which equally defy, what Hahnemann designates "antipathic" treatment, are a few out of the many ills and grievances, which have their time, seat, and origin in defective arterialization of the blood.

Dr. Bland, in very strongly recommending the different preparations of iron in chlorosis, does not assume any merit of discovery; he is well aware that it has been long the medicine in highest repute; but he very justly alludes to its not unfrequent want of efficacy; and is inclined to attribute this to the timidity with which it has been administered, and the improper forms, ill adapted to be received into the system, which have been employed. His favorite formula is thus—

℞. Ferri sulphatus,
Potassæ subcarbon. āā, ℥ss
Misce; in pilulas 48 dividend:

The dose at first, is a pill night and morning, to be increased gradually in a fortnight to 4 pills every morning, noon and evening.

Among the earliest marks of amendment is the return of color to the cheeks and lips, and of animation to the eyes; gastrodynia, want of appetite, sleeplessness, headachs, &c. are quickly much mitigated, or quite disappear. The breathing becomes easier, the pulse less weak and frequent, the strength increases, the anasarca of the limbs abates, and to cheerfulness of mind is added the feeling of bodily comfort and "bienêtre."

From the long catalogue of cases enumerated in support of the author's treatment we shall select the following, one in a female, and two in male patients.

1. A. M. aged 21, had been remarkably pale ever since her birth; but the dirty waxen hue of the skin had increased for the last three years. The catamenia were regular, but very scanty and exceedingly light colored. The health, however, was tolerably good; and neither the appetite nor the plumpness had decayed. By taking the steel pills in augmented doses for a month, she obtained bloom on her cheeks, lustre in her eyes, and vermillion in her menses!!

2. A. S. aged 57, had labored under diarrhœa for eighteen months. He was excessively weak, and had a constant pain at the epigastrium. The skin, lips, and inside of the mouth were pale and exsanguine; pulse slightly febrile; no organic lesion of the abdominal viscera to be detected: the diarrhœa was checked by opiates; and the steel pills were afterwards continued for six weeks; the patient was restored to strength and health.

3. A. L., 27 years, had suffered from the dysentery and ague during the late expedition to Algiers. His skin was blanched, his strength was utterly gone, his feet swelled at night; he suffered from oppressed breathing, and palpitations of the heart, and his sleep was uncertain and disturbed with dreams. No organic mischief was suspected and therefore the symptoms were deemed chlorotic; the diagnosis was proved correct by the speedy cure under the use of the steel medicine.

It will be observed that the author very properly mentions in all the cases, that there was no organic disease; at least search was made, and none found; for it would be altogether a most dangerous and improper practice that steel should be administered in every case of disease which was attended with pallor on the surface, and of the mucous membranes, with muscular weakness, and bodily and mental depression, without reference to any other malady which might be co-existent. Every experienced physician knows that these symptoms are every day witnessed in uterine cancers, in chronic gastro-enteritic affections, in indurated liver and spleen, &c.; and neither steel, nor any other medicine can minister to such diseased systems, the bloom, and strength, and activity of health! But in uncomplicated chlorosis, long experience has taught him to regard almost as a specific the combination of the sulphate of iron and subcarbonate of potass.—*Revue Médicale.*

[From the Edinburgh Medical and Surgical Journal.]

Remarks on the Theory and Treatment of the Scarlet Fever.

BY HUMPHREY SANDWITH, ESQ. SURGEON.

The epidemic scarlet fever, which it is my task to describe exhibited the following varieties:—

1. The majority of cases manifested a high degree of fever, with more or less of delirium, and an intense inflammation of the fauces. With considerable irregularity in the developement of animal heat, however, in this, as in the severe epidemic described by Dr. Bateman, the period when cold-washing promised to be remedial was soon over; but tepid ablutions were applicable throughout. Whether the brain was more or less implicated, the throat almost invariably ulcerated or sloughed, especially when local depletion was inadequately employed or trusted to alone. In neglected cases of this kind, the extension of the inflammation from the mucous membrane of the fauces to the excretory duct of the parotid and submaxillary glands, exasperated doubtless by the sympathetic irritation dependant on the rapid sloughing of the throat, produced excessive tumefaction of those glands and the surrounding cellular tissue, with consequent mechanical obstruction to the return of blood from the brain. A low fever with delirium, sometimes slowly, sometimes rapidly, terminated their sufferings. In the latter stages, from the extension of the inflammation to the *larynx*, this variety was prone to lapse into the fourth or that of bronchial inflammation. All were not attacked with equal severity, the symptoms being mild in a few instances.

2. In some of the cases, gastric irritation, from the extension of the inflammation of the fauces down the œsophagus to the stomach, greatly augmented the danger, by adding to the extent and importance of the inflamed surface of mucous membranes, interrupting the rash, rendering the operation of purgatives more precarious, and exasperating the irritation of the nervous system. Occasionally the whole alimentary canal seemed to participate in the affection of its upper portions. The

fatal epidemic of 1793, from Dr. Lettsom's description of it, obviously corresponded closely with this variety. It differed at the same time from those described by Drs. Fothergill and Hamilton, because decided affections of the abdominal portions of the alimentary canal were comparatively rare in this epidemic.

3. In several cases, active delirium or coma set in at once, or within a few days, after a delusively mild appearance of the disease. In the former, the excitement ran extravagantly high, the patient singing and raving by turns, until signs of oppression supervened on those of exalted sensibility. In the latter there was involuntary evacuation of the feces within a few hours of the attack. The eyes were ferrety in both, but muddier in the latter, in which also the skin was cooler, and the rash duskier. In one example, which partook of the characters of both these forms of cerebral disorder, there was extreme coldness of the extremities, with blueness of the fingers and lips, and petechiæ mingled with the eruption. Life was extinguished in these cases within two, three, or at the most four days, after the developement of the cerebral symptoms. The throat was sometimes severely inflamed; at other times the transition of the inflammation to the arachnoid membrane was almost complete. *Subsultus tendinum* occasionally appeared very early.

4. In a still greater number of cases than those of the third variety, a marked bronchial inflammation, with consequent sensorial oppression, sometimes extinguished life with equal rapidity; in other instances, in which it came on later by an extension of the *Cynanche tonsillaris* to the trachea, death ensued in a week or ten days. In this form of the disease, the rash was invariably interrupted, faded, assumed a copperish hue or wholly disappeared. The pulse was quick and feeble; the skin for the most part cool; the tongue dry and glazed; and the whole system rapidly laid prostrate.

I also witnessed some clear examples of the disease, which arranged themselves under none of these varieties, but corresponded with the irregular congestive form described by Dr. Armstrong. The most striking features were,—the cold stage, with repetitions of it so intense as to resemble approaching col-

lapse,—occasional paroxisms of febrile heat, observing no periodical exacerbations,—excessive irritation of the nervous systems,—the rash faintly emerging and disappearing, but never establishing itself,—black and offensive stools,—the throat but slightly inflamed,—the pulse varying most remarkably in frequency,—and the tongue furred, with red papillæ, but always moist.

The following were among the most prominent sequelæ of the disease. General dropsy occurred in a few instances from exposure to cold during convalescence, but proved manageable. In one instance, not resulting from cold, but obviously dependant on chronic visceral inflammation, hydrothorax supervened and proved fatal. In one case, a married female, there was inflammation and abscess of the breast. Abscess in the neck, equally annoying to the patient and the surgeon, was a frequent occurrence. But this inconvenience seldom, if ever, arose after general bleeding. Severe epistaxis was controlled in one case with difficulty, and the child rallied. Dr. Fothergill, though a humoral pathologist, had the sagacity to guess the true cause of these severe hæmorrhages, which point and not obscurely, to a better pathology. "It has happened," says he, "in this distemper, that hæmorrhage from the nose and mouth have suddenly carried off the patient. I have heard of the like accident from bleeding at the ear; but these fatal discharges most commonly happen after the patient has been ill several days; and *it seems more probable that they proceed from the separation of a slough from the branch of an artery*, rather than from the fullness of the vessels, or an effort of nature to relieve herself by a salutary crisis. This I find was also Heredia's opinion, who considers a discharge of blood, either from the mouth or nose, as a sign of the utmost danger."* Hæmorrhage from the intestines attacked another child after the fever had declined, and its removal was followed by purulent opthalmia. This patient had not been visited professionally in the earlier stages, and it eventually sunk under reiterated irritation. Chronic dysentery appeared in one solitary case after the subsidence of fever. In

* Fothergill's Works, p. 213.

another ulceration and sloughing of the throat, as well as of the leech-bites externally, from pure constitutional and strumous debility, continued long after the fever had vanished, as late indeed as the fourth week; when an extension of the ulcerative process to the larynx destroyed life by suffocation. The child had been moderately depleted by leeches only; and ammonia, quinine, and wine, were employed in aid of its enfeebled powers.

The fatality of the disease, though not an absolute measure, is yet a powerful illustration of its severity. In the treatment of the first variety, my success was on the whole encouraging, though it would probably have been greater by a freer use of the lancet. But on the third and fourth varieties, the fatality was painfully great, though eventually lessened, at least in the third species, by general bleeding in aid of other measures. Five of the fatal cases might fairly be considered beyond the reach of art, when I first saw them, from gross neglect. Something is also to be laid to the charge of ignorance among the humbler classes, who often fail to second the efforts of the surgeon by not faithfully administering medicine, employing the syringe, or ventilating the sick-room; to say nothing of the injuriously wretched accommodations too often met with in the cottages of the poor; to which may be added, the infrequency of our visits to distant villages, and late application for relief. As in epidemic cholera too, the weakest and worst constitutions are almost invariably seized by the malady, and swell the amount of its mortality. The young and delicate are among its first victims; and, as is well known, not unfrequently puerperal women. Hereditary diseases also, of the class Cachexiæ, tend greatly to aggravate the operation of this as of other morbid poisons. With the legitimate deduction of the five cases above alluded to, the mortality in the whole number was in the proportion of thirteen in eighty-one, or about one in six.

Our view of the disease has been hitherto general, embracing an account of a few of its peculiarities, and a description of its varieties; including also some mention of its sequelæ, and a statement of its fatality. The recital of a few cases will now enable our readers to obtain a more minute and thorough insight

into its real nature, which will be clearly traced in the three following examples occurring in my own family. And having had ample opportunity narrowly to watch its varied aspects, and promptly to meet its most urgent indications, a full description of the phenomena which I observed, will furnish additional data for the observations on the theory and treatment of scarlet fever, which will be found at the close.

Miss S. a vigorous girl, Æt. 12, was attacked with sore throat, October 23d, in the morning. The fauces had a deep exanthematous blush, with the usual signs of incipient fever. During the first three days the fever advanced with increasing impetuosity, the pulse rising to 140, tense, and resisting. The head and throat continued intensely painful, and the latter more vividly inflamed, in defiance of the application of thirty-eight leeches to the external fauces and temples, aided by free purgation with calomel and tartarized infusion of senna. Delirium of an active kind, producing a disposition to get out of bed, talk incessantly, and sometimes sing, set in on the fourth night, and continued uninterruptedly about forty-eight hours. It was preceded by oppression at the præcordia, loud moanings, ineffectual retchings, and distressing jactitation. Various forms of medicine failed to restrain the sickness. Great pain being complained of in the course of the œsophagus, and the tongue putting on a glazed appearance towards its point, a few leeches were applied opposite to the seat of pain, with evident relief of that symptom. Sickness still continuing, leeches were again applied to the epigastrium, followed by free calomel purgation. These measures gave relief to that symptom also. The pulse now dropped to 120, the tongue became moist, the countenance lost its anxious expression, and tranquillity, with a disposition to sleep, supplanted the moaning, tossing, and delirious excitement. Actual debility having resulted from such continued irritation, and the measures adopted for its removal, I commenced on the sixth day with carbonate of ammonia, in doses of five grains every fourth hour, and substituted rhubarb and *sal polychrest* for more drastic purgatives. The syringe now dislodged immense quantities of coagulable lymph, intermingled with sloughs. Sleep became more profound under the cordial

plan of treatment, but without any signs of coma; and an easy position on the side, with the limbs half bent, delightfully relieved the picture, when she lay supine and immoveable on her back. She slept almost uninterruptedly about thirty-six hours, during which it was difficult to give either food or medicine. The consequence was an alarming increase of debility and emaciation, which, as sleep declined, was gradually repaired by nourishing food, and alternate doses of quinine and ammonia. The fauces also, from neglect of the syringe, showed a greater abrasion of the surface, and more surrounding inflammation, in addition to the frightful ravages first discoverable on the separation of the sloughs. By the persevering use of detergent gargles, and painting the ulcers, by a camel's hair brush, with a solution of nitrate of silver,* aided by such means as improved the general health, these symptoms rapidly declined.

This severe case, which was a specimen of the first variety, blended with the second, now went on satisfactorily, with one or two unimportant sequelæ. For some time there was considerable pain in each act of deglutition at the lower part of the sternum, as if slight ulceration remained in the œsophagus. The food was made as demulcent as possible, and the sternum covered with a white pitch plaster. The throat, also, continued to improve; but several glands in the neck, on both sides, became inflamed and swollen, and the irritation was twice renewed on one side with suppuration. I should have before mentioned a slight enlargement of the sublingual and paroted glands at an early period of the disease, as well as recorded the appearance of the rash, which came out freely on the trunk, but was obviously retarded in its developement on the extremities by the extension of the inflammation of the mucous membrane of the fauces to that of the œsophagus and stomach. The little patient herself on becoming rational, spontaneously remarked to me, "Papa, I believe I owe my life to the leeches applied to the stomach. No one but myself can imagine the benefit which I immediately received."

Argenti Nitr. gr. x. Aquæ distill. scr. i. ft. lotio.

My second son, G. S. Æt. 8,* fell into the disease, October 26. The attack was insidiously mild. But the throat was inflamed, and I took the precaution to leech the external fauces the first two days, in addition to the Hamiltonian method of purgation. On the morning of the 28th, the throat looked worse, the night had been more restless, and the pulse was quicker and sharper. Ten more leeches were applied. Insidiously mild in its appearance, there was from the beginning paleness of the face and lips, a partial and transitory cutaneous efflorescence, and a dejection of mind, which indicative of some smothered disease, excited apprehension of the future. At four o'clock P. M. after awaking from a snoring sleep, in a moment he became furiously mad *(delirium ferox.)* His shrieks and yells filled the house. He leaped from the bed, bit, spat, grinned, and struggled so violently as to require the coercion of three or four persons. Every attempt to soothe him was but throwing oil on the flames. The fever was intense, the pulse 150, and vibratory in the extreme. These symptoms, coupled with the total disappearance of the rash, which had partially appeared on the trunk, showed that the inflammation was transferred to the membranes of the brain. I instantly opened a vein in the arm, and abstracted ten ounces of blood. The approach of syncope calmed the delirium, and the tongue became moist. This was followed up by calomel, of which he took fifteen grains, in three doses, in the course of eighteen hours, aided by jalap and scammony. But such was the torpor of the bowels, that little impression could be made on them by these means. The delirious paroxysm returned on the afternoon of the 29th, in spite of the application of twelve leeches to the temples in the morning, but was not equally violent. Under the direction of Dr. Throp of Leeds, who happily called on me at noon, on his return from Scarbro', I again met the active delirium by another bleeding to the extent of seven ounces. A vein being open in each arm, a quicker impression was made

* My oldest son, H. S., Æt. 9, suffered at the same time from the first variety of the disease, but in a comparatively mild and open form. Ten leeches applied twice to the fauces, with free purging, moderated the local inflammation and general fever, and he was convalescent in a week.

at a less expense of the vital fluid. Six leeches also were applied to the epigastrium, as he winced under pressure. Tartarized infusion of senna, occasionally quickened by smaller doses of calomel and jalap, was continued, but with unsatisfactory results. On the morning of the 30th, there was a more palpable remission of the symptoms; the tongue cleaner; the mind less excited, though not steadily rational; and less grinding of the teeth, which had been throughout a prominent symptom. Towards evening the delirious paroxysm returned, but in a mitigated form; and an injection being administered, it passed off with little violence. The fever and torpid bowels continued. On the 31st, he had slept better, and was more rational on awaking; pulse 120, and soft. The throat, of the pain in which he invariably complained with each exacerbation of the fever, was better; and there was some improvement in the evacuations. A febricula came on a few times each succeeding evening.

Steady attention to the state of the bowels, and mild nourishment, constituted the remainder of the treatment of this example of the third variety of the disease, until convalescence approached, which was promoted by quinine, and the cautious allowance of a more generous diet. He was convalescent within the fortnight. The inflamed throat secreted a few flakes of coagulable lymph, but never sloughed. The blood he lost by the lancet and leeches (allowing three drachms to each leech) amounted to thirty-two ounces. I should have mentioned, that the blood was exquisitely sizy, the crassamentum being perfectly spherical, and the buffy coat deeply cupped, and contracted to the size of half a crown. No extraordinary debility ensued.

My pupil, Mr. R. F., Æt. 18, became decidedly ill, October 30, after complaining a few days of slight sore throat, with catarrhal symptoms. He had imprudently washed his head. With acute fever the tonsils were slightly inflamed; but there was deep-seated inflammation in the pharynx, corresponding with Dr. Cullen's fourth species of cynanche. "*Cynanche (pharyngea) cum rubore in imis præsertim faucibus.*" Calomel and James's powder, in the dose of five grains each, with

senna mixture, produced vomiting, with but little action on the bowels. October 31st, hot skin; pulse 120, and sharp; intense thirst; continued vomiting; rash struggling to emerge on the neck and breast. One general bleeding to ℔. ß. producing a slight tendency to syncope, greatly lessened the pain of the throat, and moderated the sickness for some hours. Six grains of calomel, with tartarized infusion of senna, operated copiously; but the vomiting again returned. November 1. The posterior fauces being still deeply inflamed, twenty leeches were applied externally; and as nausea and vomiting continued, and the rash had nearly disappeared, fourteen leeches were ordered to the epigastrium, P. M. Such excessive sickness, accompanied with extreme depression of strength and spirits, indicated the serious invasion of an organ essential to life. In fact, I dreaded the approach of *gastritis*, from the following assemblage of phenomena. A dry and brownish tongue; the lips parched and chopped, the cuticle of which peeled off in thick flakes; the pulse depressed and sharp; and the bowels torpid, and their excretions most unsatisfactory; but as delirium kept off, and purgatives were beginning to act, I trusted to perseverance in their employment. Under their increasing influence nausea diminished; and as the stomach began to bear liquids better, I aided the calomel by jalap, which at length produced bilious evacuations. November 3d. By persisting in the Hamiltonian plan, the tongue had improved, the sore throat vanished, sleep had returned, the bowels acted correctly, there was less thirst, appetite returning, the pulse was 106, and soft, there was a genial glow on the skin, and the rash had reappeared freely on the chest and extremities. The citrate of ammonia, in an effervescing state, with camphor mixture, was ordered. My patient was convalescent within ten days. This was a well marked case of the second variety.

The remarks of Sydenham, when not transgressing the range of the phenomena of simple scarlet fever, contain the germ of a sound observant philosophy. The skin is an organ which discharges certain vicarious offices both in health and disease; and it is unsafe to interfere with its functions, except when they cease to be salutary. Happily the indications of such a devious

course are cognizable in all the exanthemata. The doctrine of Sydenham, not rudely to interrupt the order of nature, has been recognized by the highest authorities down to our own times. We may cite two or three of the moderns in illustration. "Some little deference," says Dr. James Johnson, "we conceive is to be paid to nature in this specific operation; and her work should not be rashly interfered with, until she appears to be going wrong."* The same conclusion results from the reasonings of Dr. Robert Jackson, who has shown, that in the eruptive diseases of specific contagion, by no violent methods can the attempt to restore the natural harmony of the system be made "without eminent risk, the movements being so rooted, that they must be permitted to go on to the appointed period and usual form of termination, *unless where they absolutely threaten danger to life*," or, as he elsewhere expresses it, "unless in evident symptoms of inflammation." And Martinet cautions us, when our dread even of a deviation in the processes of nature is justly excited, not rashly to interrupt her proceedings. "We must not, therefore," says he, "whenever the internal mucous membranes exhibit signs of irritation, hastily employ powerful antiphlogistic remedies, but bear in mind, that *its natural tendency is to diminish, as eruption appears on the skin*."† We are furnished with an instructive analogy in measles, when, as frequently happens, relief of the pectoral symptoms follows the appearance of the eruption. Steadily as this principle should be kept in view, we ought to be aware, at the same time, of the occasional departures from general rules, in which nature herself indulges without injury. We sometimes observe in a family, where the disease has pursued its usual course, that one or two have had inflammation of the mucous membrane of the fauces and smart fever, but with no rash, in spite of the employment of the warm bath, and without any other internal affection as an equivalent. Hence Heberden, in speaking of the eruption in simple scarlet fever, observes:— "The redness of the skin affords no certain mark of the degree or event of the disorder: I have seen it become much more

* Medico-Chir. Review, Dec. 1820. † Manual of Therapeutics, p. 293.

florid without any relief to the patient, and grow pale without any ill consequence."*

The superiority of the practice of the moderns over that of their predecessors consists in the discovery, that we may safely *assist* without interrupting the processes of nature, and in having ascertained, with tolerable precision, how far, in such *auxiliary* efforts, we may venture to go. The knowledge of these principles created a new æra in medical science. Such was Sydenham's horror of all interference, that he forbade even the use of glysters; and "upon procuring a few stools with manna," Dr. Fothergill gravely tells us, "the redness of the skin has disappeared, and the flux to the throat has been surprisingly increased."† Thus an inference is derived from the purgative plan, which further observation assigns to the *defect*, not to the excess of the remedy! From the authorities quoted by Dr. Hamilton,‡ as favorable to the use of purgative medicines in this disease, it is evident, that observation was gradually removing those hypothetical terrors, which, before his time, had greatly circumscribed their employment. But it was Hamilton himself who achieved the complete triumph over the prejudices of past ages; and the bold, but successful experiments of Currie had just added another trophy to the rapid advances of medical science.

By purgatives, the cold or tepid affusion, and in certain states of the system the warm bath, free ventilation, and the whole antiphlogistic regimen, much may be done in the earlier stages of scarlet fever, to favor the natural and safe developement of the disease. Most of the epidemics described by Dr. Bateman did well under what he calls, "the simple treatment of early purgatives of calomel, (with emetics in some instances) diaphoretics, and cold-washing." The late Dr. Armstrong has gone a step farther in attempting to co-operate with nature, his object being to alleviate the symptoms of the first stage of oppression, and thus, as far as possible, annihilate in embryo the rudiments of future mischief. His plan is, to employ "a brisk purgative first,—a mild emetic next,—and the tepid bath last."

* Heberden's Commentaries, p. 19. † Fothergill's Works, p. 215.
‡ Hamilton on Purgatives, p. 72.

In addition to which, in cases of palpable congestion of an important vital organ, after using the warm bath strongly impregnated with salt, he has recourse to a *moderate* local or general bleeding.* Martinet likewise observes, (p. 292) that, "when the eruption is endeavouring to establish itself, pediluvia, impregnated with mustard, are very useful in promoting its developement." The views of pathology embraced in these recommendations, take for granted the great liability of nature to fail in accomplishing her purposes, or to depart from a safe and salutary course. And Dr. Armstrong has deserved well of the profession by the rare talent for observation, which he has shown in detecting and describing many of the hitherto undefined eccentricities of nature's most untoward movements. The views of this physician, much as they have been objected to, are countenanced by Martinet in the following passage. "But these exanthemata do not always pass through their various stages with the same regularity: thus sometimes, at the commencement of the patient's illness, a complication of sympathetic phenomena, and those of a very serious nature, throw the utmost obscurity over even the nature of the disease, and exceedingly embarrass the practitioner in treating it. Of this description are cerebral congestions, agitation, perpetual restlessness, great uneasiness, sense of suffocation, oppressive breathing, langour, headache, prostration of strength, collapse, with or without reaction, &c."† But if there be one individual who more than another has thrown a clear and steady light on the pathology of scarlet fever, it is Mr. Alcock. While he, too, recognizes the principle, that "the disease is not to be treated by remedies, which too powerfully depress the powers of the constitution," his pathological inquiries into the state of the mucous membranes in all the exanthemata, have led him to the important conclusion, "that in every *severe* case of measles, small-pox, and scarlet fever, the mucous membranes are implicated;"‡ in other words, involved in inflammation, "the proof of which, in many cases, has been rendered evident on dissection." Mr. Alcock's discoveries would have been anticipated, had the earlier observers complet-

* Armstrong on Scarlet Fever, Measles, &c. p. 34.

† Martinet's Manual, p. 292. ‡ Medical Intelligencer, 1820, p. 196.

ed by the scalpel what mere observation of symptoms left imperfect in their pathology. Thus Dr. Fordyce, in his description of "the erysipelatous sore throat, or sore throat attended with ulcers," ascertained, by dint of observation, the principal seat of the disease, and the extensive hold which it takes of the internal mucous membranes. His language is remarkable. "At the same time, if the disease be violent, the mucous membrane of the other parts of the body is affected, and sickness, vomiting, and sometimes purging, come on at the beginning; these generally leave the patient in about twenty-four hours; but if they continue, they add very much to the danger: the eyes are also red and watery, the membrane of the nostrils is inflamed, a watery stimulating fluid runs from it, and sometimes hemorrhages ensue, which are often fatal, if they arise the third or fourth day, or afterwards: there are also instances of the *vagina's* being inflamed and exulcerated, and of the *menstrua* coming on, although it be not their usual period. After a day or two, the skin of the extremities and of the throat externally is often affected with erysipelatous inflammation, and little eruptions take place, relieving the sickness, purging, and other symptoms, arising from the mucous membrane of the intestines being diseased."* His description of erysipelatous sore throat corresponds so closely with the symptoms of the anginose scarlet fever, as to render their *identity* at least probable. His hypothetical distinction between *irritation* and *inflammation*, the former of which he considered the essence of the disease, and as naturally associated with debility, led him to discard "evacuations, especially by bleeding and purging, as not only useless, but detrimental." To his important conclusion, that the mucous membranes are implicated in the severe forms of scarlet fever, Mr. Alcock has subjoined another, which adds weight to the former, that "when the inflammation of a part of the mucous membrane is severe, it is more apt to run a rapid course, when attendant on the exanthemata, than under other circumstances." In confirmation of this highly important opinion, we may quote additional authorities. Thus, Dr. Bateman remarks, that "the most unyielding modifications of pneumonia have occurred as

* Fordyce's Elements of the Practice of Physic, p. 309.

the sequelæ of measles, or have supervened on hooping-cough; under both of which circumstances the ordinary remedies appear to be less efficacious than in the more simple forms of pneumonic disease." A similar remark holds good of the transition of other eruptive diseases of the skin to the internal mucous membranes. "Bronchitis," says Dr. Hastings, "arising from cutaneous diseases, is more dangerous than that proceeding from cold."*

We have remarked that our predecessors, though they occasionally approached the confines of true pathology, fell short of it from their limited knowledge of morbid anatomy. "In one that was opened after death," says Dr. Sims, "the *aspera arteria* was found lined with this matter (coagulable lymph,) like what is said of the croup. From this, and the disappearance of the ulcers in the fauces, and other symptoms already mentioned, in many fatal cases, I am led to suppose, that the visible disease in the throat was by much the least part of it, and that in bad cases it spread down to the lungs and stomach, and even perhaps through the alimentary canal."†

These conjectures the rapid advances of this department of medical science have amply confirmed. The limited knowledge of morbid anatomy alluded to, may therefore be pleaded in excuse of the vague theories of past ages. For, until the present century, but little can be gleaned on the subject from the writers on this disease. Withering mentions a solitary dissection of Sennertus, who found great ravages in the lungs and the liver. But so late as 1802, Dr. Pascalis of Philadelphia remarks, that "dissection has as yet afforded but little elucidation as to the nature of this disease."‡ Since that time, however, the morbid anatomy of scarlet fever has been sedulously cultivated; and of such inquiries this is the result, that the mucous surfaces seem to be those parts of the system on which the morbid poison operates in scarlatina, except when, from its more violent invasion of the nervous system, the larger viscera suffer through

* Hasting's Treatise on Inflammation of the Mucous Membrane of the Lungs, p. 207, 228, 230, 243.

† Memoirs of Med. Society, Vol. i. p. 437.

‡ Med. and Phys. Journal, Vol. xx. p. 123.

direct sympathy. In his enumeration of the morbid appearances, Dr. Armstrong speaks of "the brain, the liver, the stomach, the intestines, and the lungs, as the parts most often inflamed,"* not excepting "the fauces, and mucous membrane of the trachea."† Mr. Alcock, also, emphatically states, that "neither has he met with any case which terminated fatally, where, on careful examination, these membranes were found to be free from disease."‡ Equally express is the testimony of Martinet, who asserts, that "the danger of these exanthemata consists in their being accompanied with inflammation of some of the organs of the three splanchnic cavities; this complication may indeed be regarded as *essential to scarlatina* and *rubeola*."§

As the testimony of independent observers having no theory to promote, we subjoin two dissections in scarlatina, highly illustrative of the results of inflammation in the gastro-pulmonary tissues. "In a child who died on the sixth day of this distemper, and was opened, the velum pendulum was putrid; the tonsils were outwardly blackish, and livid within; the uvula was covered with a thick mucus resembling a membrane; the epiglottis was sound, and so was the œsophagus; but that mucous covering descended down the trachea quite to its division, in the upper part of which it appeared like a membrane, in the lower part it was more like mucus."‖ The following is the *post mortem* examination of a young woman Æt. 20. "The abdominal viscera were all found perfectly healthy; the lungs were gorged with blood, and some serum had been deposited in the cavity of the thorax. The lining membrane of the larynx was of a dark brown colour; it looked rather as if it were lined with a piece of wetted brown paper than with a mucous membrane. The same appearance was seen for a short distance upon the membrane of the œsophagus. The membrane of the trachea was in the highest possible state of inflammation, which inflammation extended into the bronchiæ as far as they could be traced. The membrane of the trachea was of a deep brick-dust

* Armstrong on Scarlet Fever, &c. p. 14. † Ibid. p. 21.
‡ Medical Intelligencer, 1820, p. 156. § Martinet's Manual, p. 291.
‖ Heberden's Commentaries, p. 27.

red, approaching to brown. This redness gradually assumed a brighter hue, as it extended itself upon the bronchiæ. The brain was not examined."* Our readers may think us needlessly prolix on a point now so well understood. But the important practical questions which the consideration of *post mortem* evidence involves, must plead our apology.

While the mildest form of scarlet fever hardly requires any medicines, and in its simpler anginose variety is easily controllable by purgatives and the cold or tepid affusions, aided occasionally by leeches to the throat, yet when complicated with intense degrees of inflammation of the mucous membranes or other viscera, it is only by a resolute interference with nature in her deviations from a salutary course, that health can be restored. Such interference, therefore, however bold and decisive, resolves itself equally with the milder methods of relief, into an agency *auxiliary to the vis medicatrix naturæ*. This assertion, we are aware, admits of dispute, and will be called in question by those who consider blood-letting as essentially a debilitating agent, and therefore inapplicable to the complicated phenomena presented in this disorder. The opinion, however, which refers the train of putrid symptoms, which in the worst cases rapidly develope themselves, solely to some invisible debilitating miasm that acts independently of inflammation or congestion of the vital organs, we would, with Dr. Armstrong, submit at once to the test of *post mortem* investigation. And if any inference can legitimately be drawn from that source of evidence, we assert it to be, that such symptoms are so constantly found associated with derangements in the structure or condition of vital organs, as to authorize us in concluding such derangements to be essential to their production.

Great obscurity hangs over the pathology of this disease, simply from not discriminating between the *primary* and *secondary* events in the order of causation. While the disturbances in the circulation are attributable to a debilitating miasm, these very effects of a primary become a secondary cause in relation to many of the phenomena, as, for example, those of putridity and dropsy. Dr. Good has attributed the latter to

* Bedingfield's Compendium of Medical Practice, p. 284.

the exhausting miasm of *Rosalia;* and for the same reason "forbids any evacuation that adds so immediately to the direct debility as venesection."* But sounder pathology would have looked to the state of the circulation induced by that miasm, as one which the lancet avails to remedy, and one, which if not so remedied, tends to produce the very disease incorrectly ascribed to an invisible cause. In accordance with these views, Dr. Dewees remarks, "We are inclined to believe that this affection (dropsy) arises from the accompanying inflammation not having been properly subdued by early depleting remedies."† Blood-letting, therefore, general and local, singly or combined, and adapted in amount to the circumstances of each individual case, is the grand agent on which we chiefly rely in the management of the more dangerous varieties. This powerful remedy, however, requires at once discrimination, promptitude, and discretion. Its inadequate employment, and its abuse, have equally militated against its pretensions. Blood-letting, also, like purgatives, has been proscribed in this disease chiefly through the prejudices engendered by false theories. The despumation of Sydenham, the irritation of Heberden, the debility of Withering, and the putridity of others, equally forbade the lancet. Fothergill, also, imputes the most fatal results both to purgatives and venesection, from their debilitating effects on the system.

The error was venial at a time, when the invigorating virtues of cool air and the antiphlogistic regimen were unknown, and when artificial debility was induced by external management, which rendered the operation of lowering remedies positively unsafe. But the moderns are inexcusable, and most of all Dr. Currie, who branded the use of blood-letting and purgatives as "a fatal practice,"‡ in adhering to dogmas, which the vast revolution effected in medical science by observation, experiment, and morbid anatomy, has wholly subverted. We shall therefore pass by the oracular prohibitions of the lancet by a host of modern worthies. The responses of the ancient oracles themselves having ceased to command respect, little homage is due

* Good's Study of Medicine, Vol. iii. p. 23, 25.

† Dewees's Practice of Physic, p. 223.

‡ Currie's Reports, Vol. ii. p. 50.

to their mere echoes. And yet on such slender authority, it would seem, as that of the majority of our compilers of systems of medicine, a recent anonymous author presumes to teach, that, "though the use of the lancet may now be considered as forbidden, yet the occasional use of local bleeding is admissible in certain rare cases."* In reply to this and other sweeping denunciations of the depletory practice in scarlatina, we rejoin, in the pertinent language of Dr. Heightz of Hanover, that "the mortality of the disease has run parallel to the increasing influence of the Brunonian system." Medicine being no longer an occult science, our reliance must be on those who appeal to experiments on the living, and dissections of the dead.

Dr. Cullen, who holds an intermediate place between the older theorists and modern experimentalists, states, that "When there is a pretty high degree of fever, with a full pulse, and a considerable swelling of the tonsils, bleeding is very proper, especially in adults, and it has been frequently practised with advantage."† The recommendation, however, thus authorized by *observation*, is, from the influence of *theoretic* considerations in the writer's mind, too much qualified, when he subjoins, "but it should at least not be large, and ought not to be repeated." It is remarkable, that in this plan of treating *cynanche maligna*, "the septic tendency of which is chiefly to be kept in view," a similar conflict between *theory* and *observation* characterizes his remarks. "The debility with which it is attended," he observes, "renders all evacuations by bleeding and purging improper, except in a few instances where the debility is less, and the inflammatory symptoms more considerable."‡ Physicians on the continent, Dr. Willan tells us, recommend bleeding both from the arm and jugular vein. Dr. Morton adopted the same practice in London. The methods of Dr. Armstrong, whose decisive use of the lancet in the open forms of excitement is exchanged for its more cautious employment in the insidious congestive varieties of the disease, are too familiarly known to be recapitulated. Dr. Plenciz, as quoted by Dr. Good, "is a strenuous advocate for the use of the lancet."

* "Caution to the public, or Hints upon the Nature of Scarlet Fever," p. 67.
† Cullen's First Lines, Vol. ii. p. 197. ‡ Ibid. Vol. i. p. 291.

Dewees,* Alcock,† Bedingfield,‡ Dawson,§ Martinet, and others, recommend an equally energetic practice, and all are agreed in the very great importance of topical depletion. "Leeches," says Martinet, "may be applied behind the ears, on the outside of the throat below the clavicles, or at the epigastrium, according as the symptoms are those of arachnitis, angina, bronchitis, or gastritis. Should there be great general reaction, which cannot be explained by the condition of any one organ in particular, the abstraction of a moderate quantity of blood from the arm may be employed with much benefit." Such is Martinet's advice on the very onset; before those topical inflammations have burst forth, which his principles inculcate, are only to be extinguished by still more vigorous measures. After all, the use of bleeding in scarlet fever, which, as Drs. Willan and Good have shown, came by almost general consent during the last century to be gradually disused, or employed with a paralyzing caution, is but a revival of the practice of an earlier age. Ætius as quoted by Dr. Freind, advises bleeding in the exanthemata, in order to prevent the disease from falling upon the vital parts. After combating the vulgar notion, that an *eruption* up on the skin forbids such a practice, from a dread of the humor retreating from the circumference to the centre, Dr. Freind argues, that "lessening the quantity of blood will attenuate its

* "In case the pulse be full, tense, or hard, immediate recourse is to be had to venesection. The quantity of blood drawn, and the repetitions of the operation, are to be directed of course by the judgment and experience of the practitioner. The relief felt by the patient, the appearance of the blood, and the effect on the pulse, must determine whether it shall be repeated." Dr. Dewees' Practice of Physic, Vol. i. p. 221.

† "The treatment was strictly antiphlogistic with *early depletion* when the inflammatory symptoms were such as to require it." Medical Intelligencer, 1820, p. 201.

‡ "Venesection, employed at the commencement of the disease, in cases where the symptoms of re-action are violent, will secure to the patient a comparatively mild disease." Bedingfield's Compendium, &c. p. 281.

§ "In *scarlatina anginosa*, where febrile action runs high, bleeding is to be instantly resorted to, and even a second is indicated, where symptoms shew its propriety."—"Even here, in *scarlatina maligna*, I should be reluctant to interdict venesection; but it is only in the first stage it can be used with safety, and never, unless there be high vascular action, or the system appears to be greatly oppressed." Dawson's Nosological Practice of Physic, p. 41, 43.

particles, and give them a greater freedom to circulate, so that by this means the eruption, instead of being checked, advances in a kindlier manner. Therefore in an erysipelas, small-pox, measles, *scarlet fever*, &c. if the symptoms run high, and affect the head, the lungs, or any other part, so as to give intense pain, *bleeding* will be found a very rational and safe practice; and, in fact, though I have tried no experiment more frequently, I never once observed that any of these *eruptions* struck in upon *bleeding* when the disease required that treatment."*

In ordinary circumstances of the anginose variety, purgatives and leeches, in aid of the usual system of antiphlogistic management, suffice to relieve the complaint. But purgatives require to be perseveringly employed in active doses, until the stage of excitement declines; and their efficacy may be inferred from considerations regarding the extended surface on which they act, and its sympathies with near, as well as remote, organs. This extensive and complicated mucous surface too, is, in fevers, impeded in the functions which it has to discharge as an important emunctory; and hence the necessity of unlocking its secretions, and copiously separating the fluids from the blood.

Second only in importance to purgatives are leeches, applied as closely as possible to the seat of inflammation. By emptying the anastomosing branches of vessels connected with the inflamed membrane or viscus, the congestion of its capillaries is still further diminished, and the resolution of the inflammation promoted in proportion. Such was the practice which I pursued in the first variety of the Bridlington epidemic, and with so much success, as to throw me in some degree off my guard in encountering the more formidable examples of the third variety especially. In these I had the mortification to experience, in several instances, the entire failure of the combined plan of leeches and purgation. The severity of the disease went far beyond the remedies; and even in some of those cases of the first variety in which the patient was saved, as in that of my daughter, it is obvious that life was jeoparded by inadequate

* Freind's History of Physic, Vol. i. p. 75. A. D. 1725.

measures. To say nothing of the danger arising from severe and protracted cerebral disorder, the sloughing of the fauces was a true measure of the perilous intensity of the inflammation. In several examples, therefore, of the purely anginose variety, I afterwards employed the lancet, which both simplified and shortened the course of the fever. Dr. Farre's description of the *cynanche maligna* admirably portrays what occurs in the worst forms of *scarlatina anginosa*. "The inflammatory action, which is vehement, effuses coagulable lymph on the tonsils, and, in the worst cases, on the mucous membranes of the larynx; but the strength of the action is soon spent, the lymph perishes, and the surfaces which effused it die and slough, or open into ill-conditioned ulcers."* It is no wonder, therefore, that Dr. Bateman, in the severe epidemic which he has described, should have attributed the fatality of the disease in many cases solely to the severe affection of the throat.† To disarm inflammation of the mucous membrane, like this, of its mortal violence, as well as to offer successful resistance to the still more dangerous affections of the brain and stomach, I found it necessary henceforward to employ the lancet with promptitude and vigour; and my success in immediately arresting the fatality of the disease in the first, second, and third varieties, amply justified the measure. The blood in every instance exhibited the buffy coat well-defined.

The general rule of management in the severe forms of this epidemic malady being established, it only remains that we should notice those exceptions which imply the utmost circumspection with regard to general bleeding. The cases demanding a delicate and guarded management belong chiefly to the third and fourth varieties, as above delineated, or exclude themselves from that arrangement by the eccentricity of their characters and course. Where there is palpable congestion of the brain and those important viscera immediately concerned in carrying on the business of life, manifested by a sudden and overpowering invasion, as in the Asiatic cholera, we call in the aid of the lancet, the adjuncts being ammonia internally, and warmth externally.

* Medico-Chir. Trans. Vol. iii. p. 330.

† Reports of the Diseases of London, p. 271.

If any thing can countenance the doctrine of debility from an overpowering contagious miasm, these insulated cases must have this effect. Respect to a debilitating cause, and its immediate effects on the nervous system, doubtless warrants in these instances a modification of the usual plan of treatment, and especially caution in the use of the lancet. Ammonia, the warm or spirit-air-bath, with frictions, together with one moderate venesection, regulated by the state of the circulation, and followed by calomel, constitute in these appalling circumstances the principal resources of art. Dr. Armstrong has offered some ingenious suggestions to supply the *hiatus* which every one must feel in our remedies; and Dr. Lange of Cronstadt has adopted with great success, in the analogous oppressive stage of spasmodic cholera, the use of salt emetics, and the actual cautery applied to the spine. The inhalation of vivifying gases, galvanism, and other resources of chemistry, are among remedies still under probation. The observation, in short, of the asphyxial form of this pestilence on the arena of British experiment, holds out a reasonable expectation of improvement in the treatment of that oppression of the nervous system which follows the reception of the worst contagious miasms. The intimate union of the nervous and vascular systems, leads us to look for the developement of the injury inflicted on the former in the errors of the latter; and an oppressed circulation is the morbid effect to which our remedies, though not exclusively, are imperatively directed. The most frightful debility is here no obstacle to a cautious employment of the lancet, which, in combination with stimulants, at once lessens present engorgement and future inflammation of the vital organs. The debility of more ordinary fevers will henceforward be viewed through the medium of an analogy, which will strip it of its Brunonian attributes.

The preceding remarks require accommodation when applied to those low typhoid or comatose cases, in which the prostration of the vital powers is less complete, and a partial re-action takes place. In the milder examples of this irregular type the lancet may be wholly laid aside and leeches substituted. "In the irregular form of the congestive scarlet fever, or that in

which the excitement is partially developed, purgatives and the warm bath," says Dr. Armstrong, "are the best remedies;" and they must be persevered in, he observes, "so long as the general oppression and irregular state of the excitement remain." It was by purgatives chiefly that Dr. Hamilton succeeded in an epidemic resembling very much this irregular congestive variety.

Delicate management also is required in the fourth variety, especially in its advanced stages. In adults, indeed, in whom the disease proceeds with a less fatal rapidity, and at the very onset of re-action, also, in young children, the lancet may be used more freely in the former, but sparingly in the latter; but if the inflamed surface bear a large proportion to the whole bronchial membrane, the due decarbonization of the blood is so much prevented, that the patient rapidly becomes apoplectic, or dies exhausted with a livid complexion, lips blue, and a rattling in the air-passages. It is in such circumstances, especially when called in after the disease has made some progress, that general bleeding becomes a doubtful remedy, by further weakening the already too much weakened action of the heart. Here ammonia in small doses, combined with topical depletion, mild purgatives, and immersion in the warm bath, shed a doubtful ray of hope, but too often fail to relieve. Dr. Armstrong recommends in these cases about a drachm of the solution of chlorine, mixed with six ounces of distilled water, to be given in the course of twenty-four hours.* The vegetable acids, also, added to bland mucilaginous fluids in this, as well as in every form of the disease, are grateful and salutary. The citrate of potass or soda, in a state of effervescence, is perhaps one of the best febrifuges, though recommended at first in this disease by Dr. Watson, as an antiseptic and tonic.† In the decline of fever it is advantageously exchanged for the effervescing citrate of ammonia. The only remaining qualifying considerations of the general rule of practice respect the rapid course of the disease, and the greater irritability of the nervous system of children. The former suggests an early and

* See Dr. Armstrong's Lecture on Scarlatina in the Lancet, Vol. vii. p. 324.

† Med. and Phys. Journal, Vol. xvi. p. 552.

decisive employment of the lancet in the acute forms of the disease, while both preclude its frequent repetition, the necessity for which is obviated by the powerful auxiliaries which we possess in calomel and leeches. Having made a decided impression on the disease we must desist from over-active efforts, lest nature herself be incapacitated for retracing her devious course. It is a golden observation of Dr. Farre's, that, "by those who will take the pains to consider inflammation as a process, it will be understood that it may be checked, but cannot be suddenly extinguished, by the most active means. Time must be allowed for the process to decline, even after the fairest efforts have been made to arrest its progress."*

The Scarlet Fever has prevailed in many places in this State the last three years: And it is to be regretted that some medical friend has not given us its history and treatment, for publication in this Journal. Certain it is, no disease, not even the epidemic Cholera, has been more fatal in its ravages, than this disease in some places and in some seasons. It has always assumed a great variety of character, in different years of its prevalence, and a striking difference in the degrees of morbid actions, in cases of the same neighborhood, and at the same time. Such is even the fact in the same family. Whilst one is attended with symptoms of fatal tendency from the beginning uncontrolled occasionally by any treatment; another is slightly affected, and recovers without the aid of any medicine.—It is to be hoped the next number of this Journal, will be amply supplied with communications on this subject.

* Med. Chir. Trans. Vol. iii. p. 327.

[From the Medico-chirurgical Review, July, 1832.]

Observations on the Illusions of the Insane, and on the Medico-Legal Question of their Confinement.

Translated from the French of M. ESQUIROL, BY WILLIAM LIDDELL.

ESQUIROL has long been at the head of the mad-doctors of Europe, and as he had more ample means of gaining information than almost any other individual now living, his observations must always be received with great respect and attention on the subject of insanity. M. Esquirol objects to the French laws respecting lunatics, and his translator is not satisfied with those which have been enacted on this side of the Channel. Esquirol complains that the existing law has in view rather the maintenance of public order, and the preservation of the fortune of the insane, than their restoration to liberty. Mr. Liddell criticises the English law which makes great ceremony, and throws great trouble in the way of a madman's reception into a public asylum, but requires no document or return for twelve months after a person has been immured in private confinement—perhaps without being insane at all.

But leaving these medico-legal questions to the collective wisdom of our senates, we come to purely medical subjects. We shall open our analysis with the following passage.

"Insane persons fancy they see, hear, smell, taste, and touch, although external objects are not presented to their senses, and are consequently, incapable of producing any impression upon them. This symptom is an intellectual phenomenon, totally independent of the organs of sense, and takes place although they may be inactive, or have even ceased to exist. Thus, there are deaf persons who fancy they hear, blind ones who think they see, &c. &c. The ancients had only observed this symptom, as far as it related to the remembrance of the sensations of sight, and had given it the name of *Vision*. But the analysis of the thoughts of the insane, for they do think and reason, has proved to me that this phenomenon is produced by the action of the brain, reacting upon the sensations previously received by the

other senses, as well as by that of sight. This has led me to give to this phenomenon the generic name of *Hallucinations.* In the same paper in which I pointed out one of the most remarkable psychological phenomena of delirium, I related some facts which shew that the hallucinations alone, sometimes characterize a variety of monomania."

M. Esquirol makes a marked distinction between hallucinations, or visions, and illusions.

" In hallucinations, every thing passes within the brain : visionaries, and persons under the influence of extatic impressions, are hallucinarians ; they dream even when they are awake. The activity of the brain is so energetic in them, that they give form and reality to the images which the memory re-produces, without the aid of the senses.

In illusions, on the contrary, the sensibility of the nervous extremities is excited, the senses are active, and actual impressions produce the reaction of the brain. This reaction being under the influence of the ideas and passions, which govern the insane, they are deceived as to the nature and cause of their actual sensations. Illusions are not uncommon in a state of health, but reason dissipates them. A square tower seen from a distance appears round, but if we approach it, the error is soon rectified. When we travel amongst mountains we often take them for clouds, but on looking attentively, the error is dissipated. To him, who is in a boat, the bank appears to move, reflection immediately destroys the illusion."

Hypochondriacs, he observes, have illusions which arise from the internal senses. They deceive themselves with respect to the intensity of their feelings ; but do not attribute their ailments to absurd causes, nor talk irrationally, unless affected with melancholia in addition, when there is delirium.

" Two conditions are necessary for the perception of a sensation ; the soundness of the organ which receives the impression, and the soundness of the instrument that reacts upon it.

The illusions of the senses, recognize, also, two causes ; a disordered state of the senses, and a disordered state of the brain.

"If the sensibility and activity of the organs are disturbed, it is evident that the impressions made upon the senses, by external objects, are modified; and if, at the same time, the brain is in a state of disease, it is incapable of rectifying the errors of the senses. From these causes arise illusions."

The passions, which produce so many illusions among the sane, modify also the impressions of the insane, and are the cause of a thousand illusions.

From these preliminary observations, M. Esquirol proceeds to practical illustrations, several of which we shall condense.

1. The famous Térouane de Méricourt, lived ten years in the Salpétrière in a state of insanity. She used to throw two pails of water on her bed every morning and evening, and lie down in it immediately afterwards. Some of the insane have such excessive sensibility of the skin, that the slightest touch appears to them like a deadly blow.

2. An officer was seized with an intermittent in the Prussian campaign. They gave him a glass of brandy with gun-powder in it. He became immediately insane. He lay down upon straw, but fancied the straws were the beaks of birds, and kept constantly blowing on them, to drive them away. This was also an illusion of sensation.

3. A young lady became insane after the events of 1815. She had, or fancied a fixed pain in the crown of the head; and took a mortal hatred or dread of copper in every shape. She believed there was a worm in her head devouring her brain. M. Esquirol made a crucial incision on the scalp, and allowed the blood to flow. A piece of the fibrine was shewn her, and she was assured that this was the worm. An issue was established on the part. In three months she was cured of all her illusions. The same kind of insanity occurred in another individual, and was cured by the same means.

4. A general officer became insane after some domestic affliction. He had severe pains in his teeth, which he attributed to the sun. When severe, he raged at the great luminary, swearing he would exterminate Apollo and his chariot with his brave troops. Sometimes the pain attacked his knee, and then he fancied there was a thief there.

5. A lady became hypochondriacal, and hearing the temporal arteries beat, while lying on the pillow, she fancied that her brain was liquified, and running like torrents.

Gastric and intestinal pains, flatulency, and constipation produce great illusions in the minds of the insane. M. Esquirol opened a female, who had long affirmed that she had a living animal in her stomach. She had a cancer of that organ. A woman in the Salpétrière believes that she has a whole regiment of soldiers in her belly. When the pain is violent, she roars out, and asserts that the soldiers are fighting, and wounding her with their bayonets.

We shall extract no more instances of illusions from internal sensations. We shall proceed to notice some arising from the external senses. Even in health the external senses are not infrequent sources of deception.

"The maniac hears a noise, he fancies some one speaks to him, and he answers as if questions had been addressed to him. If he hears several persons speaking, he thinks they are his friends, who are hastening to deliver him; or his subjects who are come to raise him to the throne, and to proclaim him king.

The panaphobist, on the contrary, thinks that he is spoken to in a reproachful and menacing way; he takes an insignificant phrase for the sign of a plot raised against him; and he fancies he hears enemies, police agents, and murderers, concert together to arrest and to conduct him to prison or to the scaffold. If a door opens he imagines he is lost, and is about to become the prey of those who are seeking for him."

After detailing several illustrations of illusion from the sense of hearing, M. E. proceeds to those connected with the sense of sight.

"A lady, 23 years of age, afflicted with hysterical madness, used to remain constantly at the windows of her apartments during the summer. When she saw a beautiful cloud in the sky, she screamed out 'Garnerin, Garnerin, come and take me,' and repeated the same invitation until the cloud disappeared. She mistook the clouds for balloons sent up by Garnerin.

"A cavalry officer imagined the clouds which he saw to be an army, led by Buonaparte, to make a descent upon England.

"Insane persons often collect pebbles and fragments of glass, which they fancy precious stones, diamonds, or objects of natural history, and which they preserve with the greatest care."

The sense of smell contributes to the illusions of the insane. Many persons smelling gas in the air, "fancy it unwholesome, and likely to poison them." There is something more than fancy for the first part of the illusion.

"Almost always at the commencement, and sometimes in the course, of mental diseases, the digestive functions are primarily or secondarily affected. Such patients perceive a bad taste in the food that is offered to them, which makes them conclude that it is poisoned, and they reject it with anger or with terror. This phenomenon gives rise to an aversion, on the part of the sick, to those persons who have the care of them, and which is still more marked towards those who are most dear and most devoted to them. What can be more dreadful than the fear of being poisoned by those we love?

"These symptoms cease after a few days, either by diet or evacuations, when the gastric irritation is dispersed. The latter, which gives so much uneasiness to persons who are not in the habit of attending the insane, is by no means serious, and is very unlike the obstinate refusal of some monomaniacs, who will not eat, either to satisfy an absorbing idea, such as an expiation, the fear of neglecting some precept of honour or religion, or from a desire to terminate their existence.* The refusal to take nourishment, amongst the latter, should be combated by every possible means, in order to overcome a resolution which

* "The difficulties which are experienced, in administering food to patients of this description, can hardly be conceived by those who have not had the management of them; by the use of the stomach-pump, however, these difficulties may, in some cases, be almost entirely obviated.

Some time since I had under my care an insane patient, about 30 years of age, who had been subject to epileptic fits from his boyhood. He had occasional attacks of violence, when he would remain for several days without taking any kind of nourishment. On one occasion, after abstaining longer than usual from food, it was thought advisable to give it to him against his inclination, and for that purpose I suggested the use of the stomach-pump, which I introduced with little difficulty. He was fed in this manner for two or three days, when, finding that resistance was in vain, he consented to take his food of his own accord.—*Translator.*"

threatens their lives ; whilst we should leave to themselves those patients who refuse their food because their taste and smell are perverted by the disordered state of the digestive organs."

The sense of touch, so well calculated to correct the errors of other senses, sometimes deceives the insane. Several intances are related by our author, and some have been already adduced. The following are the conclusions to which M. Esquirol comes from the foregoing facts.

" 1st. That illusions are caused by internal and external sensations.

2d. That they are the result of the sentient extremities, and of the re-action of the nervous centre.

3d. That they are as often caused by the excitement of the internal, as by that of the external senses.

4th. That they cannot be confounded with hallucinations, (visions,) since in the latter cases the brain only is excited.

5th. That illusions lead the judgment astray respecting the nature and cause of the impressions actually received, and urge the insane to acts dangerous to themselves and to others.

6th. That sex, education, profession, and habits, by modifying the reaction of the brain, modify also the character of the illusions.

7th. That illusions assume the character of the passions, and of the ideas which govern the insane.

8th. That reason dissipates the illusions of the man of sound mind, whilst it is not powerful enough to destroy those of the insane.

" If by observation I have been able to elucidate a psychological phenomenon, but little appreciated, although common in delirium,—if the facts which I have related throw some light upon the still obscure history of the aberrations of the understanding, or if they furnish therapeutic views, applicable to the treatment of mental diseases, these observations will not be entirely without interest."

Medico-legal Question as to the Confinement of the Insane.

M. Esquirol is astonished that rules are not established for pointing out the cases which demand the suspension of liberty, in the persons of the insane. We should have thought Esquirol

had been long enough in practice, and in the world, to know the difficulty of laying down precise rules upon such a point as this. We are astounded, however, at the annunciation that, in France, more than 15,000 individuals are deprived of their civil and political rights, as well as of their liberty, "without legal authority." Nevertheless, M. Esquirol agrees with all the most talented physicians of Europe, that confinement is the very best means of curing insanity.

"Amongst the numerous examples of insane persons, we meet with some individuals who recover their reason as soon as they leave their home, and lose it again on their return. When restored to their usual habits, and left to themselves, they give themselves up to excesses, experience contradictions, become angry at what they see, dread the duties and customs of the world, and the bustle of business; a thousand suspicions, troubles, and opposing pre-occupations and feelings, exalt or discourage them, and delirium breaks out. I have seen at the Salpétrière many women who could only be reasonable in the hospital, and who anxiously begged to be re-admitted, feeling, after passing some days in their family, that they were about to become ill again. Some of these patients, by returning soon enough, prevented the recurrence of the delirium; whilst others, leaving it until it was too late, were unable to escape the evil which they tried to avoid.

"We have at Charenton a young man who has had many attacks of intermittent madness. Whilst he was out of the establishment these attacks were frequent; but he has now been there five years, and has not had one return of the disorder. For the last two years this patient has enjoyed all his reason; he is, however, kept within the house for fear of an attack, although, in other respects, he is quite at liberty."

The reasons for confining the insane are thus summed up.

"1. For their own security, for that of their families, and for the maintenance of public order.

2. To remove them from the influence of the external causes which have produced their disorder, and may be likely to protract it.

3. To overcome their resistance to curative means.

4. To submit them to a regimen appropriate to their situation. And,

5. To make them resume their moral and intellectual habits."

There are objections, however, to the rule. If the patient be furiously mad, every body sees the necessity of confinement.

"But shall we confine the insane patient, who enjoys a great portion of his reason, who has only partial delirium, and who retains almost all his moral sensibility? Will not the opposition which he is about to experience deprive him of that portion of intelligence which remains? Is it not cruel to deprive a patient of the attentions of his family, and to separate a miserable being, who is loaded with grief, from the objects of his affections? Shall we remove the panaphobist from the relations and friends whom he regards as his natural protectors, and deprive him of his liberty who is afraid of the police, prisons, chains, &c. &c.? How many more objections may not be made? Experience has answered and has proved, that the insane rarely get well in the midst of their own families, and that their cure is more rapid and more certain when they are treated away from home. We dread the contact of their companions in misfortune, lest, by imitation, the ideas and actions of those already in confinement should augment their delirium. We are afraid that patients in this state may experience the same shock which is felt by other persons, forgetting that their sensibility is perverted, and that they do not feel like persons enjoying the plenitude of health. But who will dare to assert that confinement has never been prejudicial? I frankly own that it sometimes is so; for it partakes of the nature of those things, the best of which are not always free from inconveniences. What must we then conclude! That confinement should not be abused, that we should not apply it too generally, nor too exclusively; and that it should be prescribed only by the experienced physician.

"Every patient who is delirious ought not to be confined; for acute and febrile delirium often puts on the appearance of insanity. It is easy to be imposed upon in this respect; and the error is not a trifling one, for it compromises the health of the

patient, and exposes the medical attendant to censure. When we are called to a patient who is delirious, we ought not to be in a hurry to give an opinion. I have attended some cases in which I have objected to confinement, although it appeared highly necessary, on account of the violence of the delirium. This precaution would be superfluous at the commencement of a second attack of madness, or of intermittent insanity, and it would be prejudicial when there is a tendency to suicide.

" It does not follow that confinement should be prescribed for all insane persons; for if the delirium is partial or transitory; if it relates only to objects of indifference, and is unaccompanied with violent passion; if the patient has no aversion to his home, nor to the persons with whom he lives, and his delirium is independent of his domestic habits; if his real or imaginary causes of excitement are not to be found in the bosom of his family; if the fortune or life of the patient, or of his friends are not compromised, and he submits to the proper means of cure; in all these cases confinement may be useful, but is not indispensable. If the patient, retaining a large proportion of his intellect, has a great attachment to his relations, it is to be feared that confinement might aggravate the disease.

" Confinement is indispensable in mania, and also in monomania, when the patients are actuated by pride, love, or jealousy. Lypemaniacs, who are full of imaginary terrors, such as panaphobists, and patients with a tendency to suicide should also be confined. The latter are cunning and crafty, and know how to defeat the most active superintendence. Confinement alone can insure the preservation of their lives; indeed it is always necessary to be on the watch for their safety.

" Persons in a state of fatuity have only need of attention, and may remain with their friends unless peculiar circumstances, involving other parties, should render separation necessary; a pregnant woman, who is easily excited, would run some risk, perhaps, in living constantly with a person in a state of fatuity, although he might be very quiet. The presence of an insane person, in a family composed of several children, especially young ladies, might become a predisposing cause of mental diseases, and confinement would be therefore necessary.

"Idiots have nothing to hope from confinement: if they are shut up it is only to preserve them from the accidents to which their condition exposes them; to remove them from the raillery of the ignorant, and to prevent their becoming the instruments which malefactors have sometimes made use of for criminal purposes.

"The insane poor ought generally to be confined, as their relations are without the means of procuring proper attendance for them.

"Whenever an insane patient, whatever may be the character of the disease, has been treated at home for a longer or a shorter period, his health requires that confinement should be tried, as one of the most powerful means of cure."

With this extract, we conclude our notice of the work. With the exception of a few literal or verbal errors, the translation is a very fair one.

[From Dr. Roots' Clinical Lectures.]

Acute Rheumatism.

Passing over some cases of different kinds, and one of acute rheumatism, of a rather interesting character, we will give Dr. Roots' ideas and experience on the treatment of rheumatism. After commenting on the bark treatment, which he has not seen successful, he goes on to state that he has found moderate bleeding, in the early stage, beneficial, and never had reason to believe that pericarditis was a consequence of it; indeed, his practice, has led him to the opposite conclusion. He then proceeds to observe, with respect to colchicum, that it has proved, in his opinion, one of the most useful remedies in the treatment of rheumatism.

"Many, I believe (says Dr. R.), consider that it possesses specific powers over the disease; I do not think so; I have never seen it exercise any control over the disease unless it purged or vomited, and have always seen it prove most useful when it purged pretty actively. You will find too, many other hy-

dragogue cathartics, as they are termed, equally useful in checking rheumatic inflammation; elaterium, for example, and camboge. More than ten years ago, I treated several cases of acute rheumatism in St. Pancras Infirmary, by bleeding, and a grain of elaterium, given every morning for three or four days, and I found the cases get well quite as quickly as those treated with colchicum, but as the elaterium is less manageable, more likely to distress the stomach and excite vomiting than the colchicum, I certainly prefer the latter; I believe that its good effects in rheumatism are ascribable to its action as a counter-irritant on the mucous membrane of the alimentary canal, exciting, as it were temporarily, disease in a tissue of the body, different from that which is the seat of rheumatic inflammation, and at the same time diminishing the general excitement of the system through the evacuations which it produces, as I believe it to be much more useful when it purges, than when it excites vomiting only; I am, as you well know, in the habit of generally combining it with an alkali, or alkaline earth, as the carbonate of magnesia, which combination tends to diminish its emetic effect, and at the same time increases its purgative action; if this, however, is not sufficient, and it often is not, then its emetic property may be still further controlled by adding a minim or two of hydrocyanic acid to each dose, for the knowledge of which valuable fact I am indebted to Dr. Elliotson. But useful as colchicum is generally in the treatment of rheumatism, you will not unfrequently meet with cases in which the disease mocks its employment, and this is more especially the case where the inflammation is confined to bursal or ligamentous tissues, here you will find local depletion by leeches, cold application, and mercury, do far more good than colchicum."

In this estimate of colchicum we coincide with Dr. Roots. We are in the habit of employing it extensively in many affections, and have ever observed, as Dr. R. has done, that it has done good in proportion as it has purged or vomited. We do not think so much of the combination with magnesia, excepting in cases of gout, as Dr. Roots appears to do. We usually combine it with antimony and with sulphate of magnesia, in saline draughts, and although we often give doses of half a drachm

every four hours, we have not yet had reason to repent our boldness. Of course the patient must be watched, and of course, also, the remedy must be suited to the stage of the disease and the powers of the patient. It is only when there is much inflammatory action that we would think of pushing antimony and colchicum.

[From the Edinburgh Medical and Surgical Journal.]

Essays on the effects of Iodine in Scrofulous Diseases.

Translated from the French of M. Lugol.

We pass to M. Lugol's observations on the mode of prescribing the preparations of iodine. Of both the tincture and syrup of iodine he disapproves, on account of their being apt to be precipitated on the parietes of the stomach, and produce evil consequences. At first, as mentioned above, a solution of iodine in distilled waters was exhibited, but the slight solubility of the medicine, and its liability to decomposition when kept, especially in the light, induced him to adopt the following formula.

Iodurettted Mineral Water.

	No. 1.	No. 2.	No. 3.
℞ Iodine,	gr. $\frac{3}{4}$	gr. j.	gr. $1\frac{1}{4}$
Hydriodate of potass,	gr. $1\frac{1}{2}$	gr. 11	gr. $11\frac{1}{2}$
Distilled Water,	℥ viij.	℥ viij.	℥ viij.

This is perfectly transparent, of a beautiful orange-colour and keeps for a considerable time. When, as for children, it is deemed expedient to mix it with sugar, it should be done extemporaneously, as in a few hours it would be decomposed, and its activity partly destroyed. At first he prescribes two-thirds of No 1, and in the second fortnight he gives the whole. During the fourth fortnight, or beginning of the fifth, he gives a grain daily, and usually continues the same quantity to the end of the treatment. In some cases he has prescribed one-fourth grains daily, and more rarely one-half, but he never exceeds that

quantity. It will be seen, then, that M. Lugol's extreme dose is only one-half of Dr. Coindet's usual one.

For preparing the mineral water on a large scale, he dissolves one scruple of iodine, and two of hydriodate of potass in seven ounces of distilled water. This may be diluted so as to form any of the first formula, and in private practice may be more convenient. M. Lugol began by giving six drops in the morning fasting, and six in the afternoon, before dinner, in half a glass of water flavored with sugar. Every week he increased the dose by two drops, till it reached thirty or forty drops daily. For children under seven he recommends two drops twice a day, to be increased gradually to five. From seven to fourteen he seldom exceeds sixteen drops daily, and does not conceive it prudent to do so. The employment of the concentrated drops prevents the exact quantity of iodine from being determined so precisely as in the mineral water. The daily quantity should always be given in divided doses, otherwise it is apt to pass off by the kidneys without exercising any therapeutic influence over the diseases in which it is usually employed. This fact, however, may be taken advantage of in some cases; and M. Lugol has administered it with success in abdominal dropsy. When constipation ensues he either gives calomel pills and continues iodine, or suspends its use, and in the interval exhibits the milder aperients.

For the external local treatment of disease, M. Lugol employs the following preparations.

1.—*Iodurretted Ointment.*

℞ Iodine, . .	gr. xii.
Hydriodate of potass,	℈ iv.
Fresh Lard, . .	℥ ij.

This ointment ought to be prepared fresh.

2.—*Ointment of the Proto-ioduret of Mercury.*

	No. 1.	No. 2.	No. 3.
℞ Proto-ioduret of Mercury,	℈ ij.	℈ iij.	℈ iv.
Fresh Lard, . .	℥ ij.	℥ ij.	℥ ij.

"This ointment is, when properly prepared, of a canary-yellow color; sometimes it presents a dead-green tint, which is owing

to the presence of some protoxide of the metal. At other times its color approaches to the orange, from deuto-ioduret being formed. The latter admixture must be carefully avoided, the deuto-ioduret of mercury being nearly as escharotic as the deuto-chloruret or corrosive sublimate."

3.—*Solution of Iodine for External Use.*

	No. 1.	No. 2.	No. 3.
℞ Iodine, . .	gr. ij.	gr. iij.	gr. iv.
Hydriodate of Potash,	gr. iv.	gr. vj.	gr. viij.
Distilled Water,	℔ j.	℔ j.	℔ j.

This is useful for injections.

4.—*Rubefacient Solution of Iodine.*

℞ Iodine, ...	ʒ iv.
Hydriodate of Potash, .	℥ j.
Distilled Water, . .	℥ vj.

This should be kept in a bottle with a glass stopper, as it rapidly corrodes corks. Besides serving as a rubefacient, it may be used for the preparation of five or six local baths and ioduretted poultices. *Wooden* boxes should be used for the baths.

5.—*Caustic Iodine*

℞ Iodine, ...	℥ i.
Hydriodate of Potash, . .	℥ i.
Distilled Water, . .	℥ ij.

This preparation differs from the ioduretted solution only in its greater degree of strength. M. Lugol employed it when the first formula proved too weak. He has also used it to "repress excessive granulations, and to modify the state of the red hypertrophied skin, impregnated with pus, surrounding certain scrofulous ulcers and tubercles."

We have now taken a brief view of the first part of the work before us; its merits may be summed up in the words of the translator.

"The chief merit of M. Lugol's Essays will, I believe, be found to consist in the precision and skill with which he has investigated the proper forms and doses in which iodine should

be administered. Next to this his constancy and patience in the routine of treatment will perhaps be estimated. On both these points mainly depend the numerous and astonishing successes described in the cases, and which, authenticated as they are by the personal testimony of some of the most distinguished physicians in the world, are calculated, at the same time, to afford sincere pleasure to the medical philanthropist, and well-founded hope to the subjects of this hereditary evil."

Of the second part, the work of the translator, we shall merely observe that it forms by no means the least interesting part of the volume.

We extract Dr. O'Shaughnessy's remarks on the adulterations of iodine.

"From the high price at which iodine was sold on its first introduction into medicine, a great inducement was afforded for its adulteration, and accordingly, with a clumsiness and ignorance only equalled by their shameful cupidity, some druggists were in the habit of mixing the iodine with a liberal per centage of *charcoal*, the protoxide of iron, plumbago, or the carburet of that metal. Although the price of that article has fallen to 1s. 6d. the ounce, with many eminent and honorable wholesale houses, still, perhaps, from the difficulty of abandoning old habits, some dealers yet practise the admixture above-mentioned. The fraud may be at once discovered by heating ten grains, (accurately weighed), of the suspected samples, in a glass tube, and continuing the heat till no violent vapour is evolved; if any residuum remain, it indicates an adulteration, the extent of which may be ascertained by the weight of the fixed matter. Perhaps an easier process is by throwing the suspected specimen into strong alcohol, in sufficient quantity. All the foreign ingredients above-enumerated, remain undissolved. By either of these methods, the mixture of charcoal, the protoxide of iron, or the carburet of iron, may be discovered. I should not omit to add, that I have met with one specimen much more artfully and scientifically adulterated, and in which the fraudulent ingredients were at the same time soluble in alcohol, and volatilized by heat. I forbear, however, alluding to this mixture more minutely, because the fraud is compar-

atively so difficult of detection, that describing it would perhaps only lead to its more general practice."

In conclusion, we would observe, that from a review of all the authentic cases in which iodine has proved successful, we are inclined to think that all its effects may be referred to its power of acting as a tonic, and either stimulating the capillaries to a more healthy action, or exciting the absorbents, and that in cases where these effects can be of no service, it is worse than useless to exhibit it.

But whatever may be its effects in other diseases, we must allow that over bronchocele and the various forms of scrofula, it exerts a beneficial influence. Whether it have any effect over the strumous diathesis, remains yet to be proved. May we hope that among our countrymen there may be found one endued with the patience and talent of Lugol, to investigate this portion of the subject? We cannot help thinking, that it would be more satisfactory and useful for practitioners to turn their attention to this, than to make random experiments on diseases which are either not well understood, or in all probability incurable.

[From the Medico-chirurgical Review, October, 1833.]

Dr. Ayre on Cholera.

Though we received this work at the eleventh hour, we are unwilling to let it pass unnoticed in the present number. The epidemic has paid us another smart visitation, and how long it may continue to recur is yet a matter of conjecture. Dr. Ayre's attention has long been directed to cholera, both the common annual disease and the malignant, or epidemic form of the malady. His opinions and practice are, therefore, entitled to the serious consideration of the profession.

It is curious that, in the year 1817, (the date of the great outbreak of the disease in India,) cholera was epidemic in England, and was described, in 1818, by Dr. Ayre himself. Speaking of severe cases and types, he observes—

"This was especially the case in the year 1817, when it prevailed as an epidemic; and when, amongst several of a milder grade, there were a great many cases of it, in which, as a part of the complaint, there arose a condition of the system, which had rarely before been witnessed, and never, perhaps, with such distinctness. This condition consisted in a great oppression or collapse of the vital powers, and disturbance in the nervous and sanguiferous systems; and characterised by a deathlike coldness and lividness of the surface, by a feeble pulse, a sunken countenance, violent vomiting, with a manifest diminution or suspension in the secretion of the bile. When these symptoms subsided spontaneously, and the patient survived them, a state of fever supervened, which, after running a course of one or two weeks, frequently assumed a typhoid form."

Dr. Ayre considers the Indian and the English disease to be identical—the epidemic character rendering the latter more fatal and formidable than when in the sporadic form. In a chapter on the remote causes, he very ably advocates the epidemic and non-contagious nature of the disease; but enough has been said on that subject, and we hear little or nothing now about contagion. In some of our hospitals, when a case occurs in a ward, the patient is not even removed to a separate ward, but treated till death or recovery takes place, like any other patient, and without exciting the least alarm of infection among the residents of the same ward! Who would have believed this in the beginning of last year!!

One of Dr. Ayre's chapters is on the nature or pathology of cholera. Dr. Ayre thinks that the collapse cannot be accounted for, by any supposed change in the composition of the blood, or any loss of certain constituent parts of that important fluid. On the latter point we certainly disagree with our author. The more we see of cholera, the more we are convinced that the disease in all its worst forms, is a *serious hæmorrhage* from the mucous membrane of the alimentary canal. We quite agree with Dr. Ayre, that—"The premonitory diarrhœa, which, if neglected, runs into the disease, and in a multitude of cases forms the incipient stage of it, is often directly induced by irregularities of diet, as a large indigestible meal,

and may be arrested, and the full developement of the true disease prevented, by remedies of a common kind, and which have confessedly no power to prevent, or correct any *change* in the condition of the blood." Granted. We are quite convinced that, be the primary cause what it may—malaria, atmospheric constitution, or contagion if you please—the effect is a diarrhœa, which diarrhœa is the first stage of the serous hæmorrhage—and collapse is the natural consequence of the loss of the serous part of the blood. This loss is, we verily believe, worse than an equal loss of pure blood from the bowels; because, in common hæmorrhage, what blood is left, is fluid and good; whereas, in cholera it is thick and unfit to circulate or support life. The pith of Dr. Ayre's theory is found in the first of his inferences.

" 1st. That the cholera morbus essentially consists in an interruption, and, in its malignant form, in a sudden and entire cessation of the secretion of the liver, and primarily, as the result of it, of a congestion of the portal circle, or secretory system of veins of the liver; and, in the malignant kind, successively of those veins of the abdominal viscera and vertebral column, whose venous circulation is associated with them."

We need hardly remark that this is almost precisely the theory broached nearly 20 years ago, by the editor of this Journal, as any one may ascertain by referring to the chapter on cholera morbus, or mort de chien, in first and all subsequent editions of " the Influence of Tropical Climates, &c." We shall quote the ninth inference respecting the remote cause.

" 9th. That the remote cause of the foregoing pathological conditions consists in a morbid irritation primarily set up in the stomach and bowels by a certain malaria, assisted by unwholesome ingesta;—that the malaria is of a specific nature, and generated in certain localities conspicuous for defective drainage and other definite peculiarities, and modified or wrought into its state of malignancy by certain concurrent, but unappreciable conditions of the atmosphere;—that the specific malaria thus modified exerts its influence chiefly in the localities where it is generated, and where, from its concentration, it is embued with the most power; and, lastly, that it affects within the range

of its inflence almost exclusively those only of the community in whom a predisposition is induced by the habitual disuse of animal food and by the derangement of the stomach and of the system, and which has resulted from an exclusive, and, therefore, inordinate use of a vegetable and ascescent diet."

The above is also the etiology maintained by Dr. Johnson twenty years ago, in the volume alluded to.

TREATMENT.

In the premonitory diarrhœa, or first stage of the disease, Dr. Ayre gives one grain of calomel united with two or three drops of laudanum, repeated every hour, or every half hour, for six or eight successive times—and then, every six hours, or twice a day, for a short period, directing rice to be substituted for bread or potatoes, and to take some animal food. The patients were directed, if the disease assumed a more serious form, to begin immediately with the calomel and laudanum, every five or ten minutes, and to acquaint him with the change. Very few treated in this manner lapsed into the worst stages of the disease.

In the stage of *collapse*, Dr. Ayre usually gave a grain of calomel, with one drop of Battley's sedative liquor, in a teaspoonful of cold water, every five or ten minutes, according to the urgency of the case.

"In a few cases of extreme severity, I gave two grains of calomel every five minutes for an hour or two, and then resumed the ordinary dose of one grain. In giving this medicine, no other limit is required to be set to its use than that which the state of congestion or collapse imposes; for pending its duration the medicine must be uninterruptedly continued, watching, at the same time, the decline of the disease, and widening the intervals of giving the medicine to ten, fifteen, and twenty minutes, until it becomes evident, by the symptoms, that this stage of the disease has passed away; for the mercurial effect of ptyalism, which is of no advantage to the complaint, will be excited if the medicine be used to any extent, either before the collapse has commenced, or after it is removed. In a very few cases only were there any ptyalism produced, and in them it

was inconsiderable, and chiefly confined to the slighter kinds, and to those which were treated as premonitory, and not reported."

In cases of the most intense severity, and where the collapse had been greatly protracted, with profuse discharges from the bowels, much advantage was derived from starch and broth glysters, with opium. Except cataplasms of mustard to the abdomen, with bags of hot sand to the feet, few other auxiliaries were used. Indeed we have every reason to believe that thousands of lives have been lost from officious interference, and a farrago of heterogeneous and stimulating remedies, in this formidable complaint.

We need not dwell on the consecutive fever. It is always symptomatic of inflammation, and generally of the stomach or bowels. Leeches to the epigastrium, and antiphlogistic treatment are the best practice.

In conclusion, we believe this plan of Dr. Ayre's to be, perhaps, the best as it is the simplest of any now in practice. With some modification, it is that which we have employed in the epidemic of this year.

[From the Medico-chirurgical Review, July, 1832.]

Westminster Ophthalmic Hospital.

A Quarterly return of the patients treated in and at this hospital has lately been made to its governors and friends. It shews the number of applicants on the increase, and the only source of regret that it presents, is the circumstance of the inadequacy of the funds to confer all the benefit that could be wished and is solicited. Those funds, however, are now on the increase, and we trust will yet be greatly and sufficiently augmented.

The results of the treatment of the patients that have attended during the period included in the return, have been highly satisfactory; and, by a reference to another part of this report, it will be seen that the treatment adopted in the severest form of

purulent inflammation of the conjunctiva, gonorrhœal ophthalmia, has proved as successful as heretofore. In none of those instances where infants have been brought labouring under purulent ophthalmia, prior to disorganization of one or more of the textures of the eye, has there been an unfavourable result. But parents not unfrequently apply with children, who, from neglect, have lost one or both their eyes by this complaint. Since January, children have been brought to the hospital under these unfortunate circumstances.

The cases of catarrhal inflammation have been successfully treated by the early or immediate use of stimulating applications, conjoined, in those instances which seemed to require them, with the application of leeches, or the abstraction of blood by cupping; but the cases requiring such local depletion were not numerous.

In the treatment of inflammations of the cornea, terminating in, or rather causing, interstitial abscess, the exhibition of mercury has been chiefly relied upon. In some cases, where constitutional symptoms demanded it, quinine has been advantageously combined with it. Matter effused into the anterior chamber, and constituting "hypopium," has in all the cases, been absorbed under the use of the mercury; and local stimulants were resorted to for the treatment of the superficial ulceration of the cornea. All these cases but one ended favourably. In that one instance, ulceration penetrated the cornea, the iris protruded through the ulcerated aperture, and loss of vision is the consequence, the eye being staphylomatous. This is mainly to be attributed to the careless conduct of the parents of the child, in not bringing her to the hospital, so that the proper plan of treatment could not be pursued.

Ulcers of the cornea have been treated by the use of solutions of the nitrate of silver, the ointment of the same, and, in some instances, the application of that caustic in substance. The granulated state of the lids, the result, most frequently, of erysipelatous inflammation, has been treated by the application of the sulphate of copper in substance, rubbed over the granulated surface. Many of these cases, necessarily tedious from

their nature, have, however, given way under this method, and the irritation resulting from the condition of the conjunctiva has thus been removed.

Among the patients presenting themselves with scrofulous ophthalmia, there were many that required long and continued treatment; and, of course, one system would not apply to the variety of cases which occurred. In some, local stimulants and the antiphlogistic plan answered best—in others, tonics were required: several were benefited by the internal use of the liquor potassæ, and three or four almost inveterate cases were cured by the exhibition of the ext. hysociami after the foregoing methods had failed of success. Keeping the lower lid depressed by the use of adhesive plaster, in one instance, seems to have been beneficial.

Many of the cases of amaurosis were obviously incurable; but several individuals have completely regained their vision, although they had labored for some time under this disease; in many of the severer cases, relief has been given to urgent or painful symptoms.

Several patients have applied with disorganization of the eye from inflammation, in some cases the consequence of injuries. Such relief was afforded as their particular states would admit of; but in some instances, the derangement of the structure of the eye was so great, that a cessation of local irritation was all the benefit that could possibly be obtained.

The treatment of iritis has been that usually adopted at this hospital—antiphlogistic remedies—the use of oil of turpentine in some, and of mercury in other cases. Two of these, as will be seen in a more detailed account, were not so successful as the remainder; but there are some particular features in these cases which will account in part for the occurrence. Such has been the treatment of the cases contained in the numerical return annexed to this report. The operations for cataract have, with one exception, a case of extraction, been attended with success; but in that instance so much inflammation followed the operation, that the patient will not recover the use of that eye.

Operation of Depression, ... 1
————Breaking up of the Cataract, . . . 6
————Extraction, ... 3
————For a capsular Cataract, ... 1

To be repeated.

Added to this statement is a more detailed report of such cases as possess particular interest. They are extracted from the books which are kept at the hospital, and have all occurred during the last few months. We shall endeavour to select such cases of each of the more important and frequent diseases of the eye, as will display the effects of different or opposite methods of treatment. It is only by comparisons like these, instituted in a spirit of candour, and pursued with care, uncolored by partiality, and as scrupulously correct in the detail as circumstances will permit, that any solid or permanent improvement can be expected in the treatment of these complaints. With every disposition to adhere to the facts, inaccuracies must necessarily creep in, and all that reporters can promise, is to use their best endeavours to avoid them.

In the following report we shall pursue what appears to be a natural order, giving first the cases of affections of the superficial tunics, and external parts of the apparatus of vision, and then the deeper-seated diseases. Pursuant to this method, we will consider seriatim the affections of the conjunctiva—those of the cornea—of the iris—of the lens—and finally that extensive and formidable class of alterations of the deeper tunics, of which amaurosis is the symbol and the representative.

Before we commence the detail of these cases, we venture to indulge in a few observations on the general arrangements of this Institution, and in doing so we reluctantly refrain from offering to Mr. Guthrie what cannot justly be termed a compliment, on the indefatigable zeal with which he has raised it to its present station, the talent with which he presides over the department peculiarly his own, and the anxiety which he displays in affording opportunities of practice and instruction to the gentlemen who are studying ophthalmic surgery within its walls. These gentlemen, owing to the opportunities which they enjoy, must

necessarily extend to a very wide circle, the advantages derived from the establishment of an Ophthalmic Hospital at the west end of the metropolis.

To return from this digression. The hospital is calculated to accommodate both in and out patients. Owing to the expenses which have been incurred in the erection of the building, but few in-patients can at present be received, but the number of those who attend as out-patients is very considerable. The latter are seen regularly on the days of Mr. Guthrie's attendance, thrice in a week. From 120 to 140 and upwards are usually present. Patients are admitted on application. After the applicant is seen by Mr. Guthrie, he or she is confided to the care of a pupil, who obtains the management of the case under the superintendence, and, if necessary, direction of Mr. Guthrie. Notes of each case, with the record of the treatment are preserved, and if the details are sufficiently interesting they are transferred to the hospital books which are kept for the purpose. Such is the general outline of the management of the institution. It is supported by subscribers of one or two guineas annually, who become by their subscription Governors. We do not solicit eleemosynary bounty for the hospital, yet we may be permitted to observe that it well deserves the encouragement of those anxious for the diffusion of information and advancement of science in the profession, and of all benevolent and humane individuals out of it. If sufficiently supported, it will be the means of materially diminishing the infirmities and consequently the miseries of the poor in its immediate vicinity, as well as of rendering the young men educated in the west end of the metropolis more qualified to execute their professional duties, with credit to themselves, and advantage to the public.

Affections of the Conjunctiva.

1. Catarrhal Ophthalmia.

This, as our readers are aware, is the most common affection of the eye, at least in persons beyond the age of puberty and adults. The redness is usually inconsiderable, at least in the conjunctiva of the globe—there is much epiphora—and the feeling of sand within the palpebræ is very inconvenient. The

usual treatment pursued at this hospital, in recent cases, is to give an emetic or purgative, or an emeto-cathartic, as the mixture of the tartarized antimony and the sulphate of magnesia, and drop into the eye a solution of the nitrate of silver, gr. iv. ad ℥j. or introduce the unguentum argenti nitratis. Leeches, cupping, or blisters are rarely used, but occasionally they are so, when the severity of the pain, or the extreme vascularity, or extreme epiphora, appear to require them. This treatment is very successful, and practitioners unaccustomed to or unacquainted with it, at times evince no little surprise at the benefits derived from it. We shall give a few cases in which different applications were adopted.

Case 1.—*Catarrhal Inflammation of both Eyes—Solut. Arg. Nit. used for one,—Ung. Arg. Nig. for the other cure.*

Ann Andrews, Æt. 39, a waistcoat-maker, stout and apparently healthy, applied at the hospital April 2d, 1832. There was catarrhal ophthalmia of either eye, puffiness of the palpebræ, a sensation of great heat, and much epiphora. The right eye had been affected for five days, and worse than the left; this latter had been affected for three days.

Unguentum argent. nit. oculo dextro. Lotio argenti nitratis, gr. iv. *ad* ℥j. *oculo sinistro. Magnes. sulph.* ℥ss. *c. Ant. tart.* gr. ij. *hodie.*

3d. *Repet. ung. et lotio.*

4th. Both eyes greatly improved, left the most so. Says that the ointment produces such pain, which continues during the day, that she will not submit to its future employment. Wishes solution to be used to both eyes.

Appr. lotio oculo utrique. Magnes. sulph. ℥ss. *hodie.*

9. Solution has been applied every other day. Is now quite well —indeed she has been so for two or three days. This was a severe case on its first appearance, and the result of course satisfactory.

CASE 2.—*Catarrhal Ophthalmia of both Eyes, cured by the Ung. Argent. Nit.*

Mary Ann Lanthorne, Æt. 53, seller of street breakfasts, 13th April, 1832. Slight catarrhal ophthalmia of left eye, not much vascularity nor epiphora; right affected, but to a less degree. Complaint has existed for six weeks. Of rheumatic habit, and attributes the affection to cold in following her employment.

Unguent. argent. nit. oculo utrique. Pil. hyd. Ext. col. c. āā gr. v. *h. n.*

16th. Eyes improved.

Pil. al. c. myrrh. gr. v. *h. n. Repr. unguent.*

30th. Has absented herself since last report. Eyes much worse—great epiphora—agglutination of edges of palpebræ in the morning.

Ung. hyd. nitrat. mitius palpebris. Pulv. rhœi, c. Cal. h. n. Mag. sulph. cràs. P. c. ung.

May 2d. Better. Excoriation at outer canthus of left eye, apparently from the epiphora.

P. emp. canth. temp. sinistro.

This plan was persevered in, and, on the 18th, she returned thanks and was dismissed. The only remnant of her malady, was a disposition to agglutination of the lids in the morning, and some weakness of vision. For this she had some dilute citrine ointment, and was directed to employ ablution, &c. Had the patient attended regularly in the first instance, it is more than probable that she would have been cured by two or three applications of the black ointment. As it was, the effect was marked and satisfactory.

CASE 3.—*Catarrhal Ophthalmia, of a Month's Standing, cured by Solut. Argent. Nit.*

George Marshall, a cabinet-maker, Æt. 17, April 30th, 1832. Catarrhal inflammation of either eye—affection not very severe. Looks out of health—bowels confined. Affection has existed for a month—has only used warm water.

Solut. argent. nit. (gr. vj. *ad* ℥j.) *oculo utrique. Pulv. jal. c., C. mag. sulph. cràs.*

May 2d. Much better; scarcely any conjunctival redness. Sensation of sand between the globe and upper lid. *P.*

4th. Relapse last night. The weather is very cold, and many of the patients have applied with relapses.

Pulv. cal. c. rheo, h. n. Mag. sulph. crās. P. c. solutione.

9th. Scarcely any epiphora or vascularity, but eyes feel weak in the mornings.

P. c. solutione ter in hebdomad. Solutio hyd. oxymuriat (gr. j. *ad* ℥vj.) *pro collyrio. bis. terve die.*

18th. Wishes to be discharged—merely a little weakness of the eyes in bright sunshine.

Habeat solut. hyd. oxymur. ℥vj.

Discharged.

Case 4.—*Old Catarrhal Ophthalmia, cured speedily by Cup. Sulph.*

Martha Thorpe, Æt. 29, March 28th, 1832. Catarrhal inflammation of one eye, of five month's duration.

Pulv. jalap. comp. ℈j. *Applicetur palpeb. Cup. Sulph.*

30th. *Rep. Cup. Sulph.*

April 11th. The blue stone has been applied every other day, and the patient considers herself cured. Dismissed.

We have taken these few cases of catarrhal ophthalmia indiscriminately and without selection, as they shew the usual method of treatment and its results. We have seen no case that has not terminated well and speedily, though, of course, we do not mean to say that catarrhal inflammation will not occasionally end in grave affections, under any management. However, it is quite certain that the copious leechings and active depletion that were formerly resorted to by all, and are still practised by many, are not to be compared, in point of safety and success, with the modern moderately-stimulating plan. As an instance of this, we may mention a case now under treatment. A woman applied, a few days ago, with old catarrhal inflammation of one eye and recent affection of the other. She stated that the inflammation of the former began just in the same manner with that of the latter. She had been from the first under the care of an eminent oculist; but becoming dis-

satisfied at the progress of the case, she had just discontinued her attendance upon him. She had been freely leeched, cupped and purged.

We dropped a solution of the argent. nit. into the worst eye, and vinum opii into that recently affected, applied a blister to the temple, and gave a strong aluminous lotion. Two days afterwards she returned, with the recent catarrhal inflammation cured, and that of the other eye much relieved.

Case 5.—*Chronic Inflammation of the Conjunctiva, rapidly cured by Solut. Arg. Nit.*

Eliza Cully, Æt. 12, pauper, of very delicate appearance, May 9th, 1832. Considerable vascularity of the conjunctiva, both sclerotic and palpebral, of left eye—vessels on former disposed in form of net work, of rather dull tint—palpebral conjunctiva villous in appearance. At outer margin of cornea, an elevation, apparently caused by deposition between the conjunctiva and sclerotica; slight pustules on this elevation, with contiguous superficial ulceration of margin of cornea. Little epiphora—slight intolerance—some nocturnal pain in temple—cornea clear—pupil rather contracted.

Affection has lasted three weeks—leeches and blisters have been applied—is getting worse rather than better. Was formerly O. P. twice.

Pulv. rhœi, c. cal. h. n. Solut. arg. nit. (gr. v. *ad* ℥j.) *ter in hebd. Ung. hyd. mitius o. mane palpeb.*

14th. Much the same.

P. emp. canth. ponè aurem.

18th. Remarkable improvement—vascularity nearly gone. *P.*

23d. Cured—to have some citrine ointment.

As blisters had been previously applied without benefit, it is reasonable to suppose that the local stimulants were operative in effecting the cure.

II. Purulent Ophthalmia.

Case 6.—*Gonorrhœal Ophthalmia, treated by the Unguent. Nigrum.*

John Durant, Æt. 21, admitted Aug. 10th, 1831. The left eye is destroyed, nearly the whole of the cornea having slough-

ed away, and the humors having escaped—conjunctiva extremely vascular and chemosed—lids thickened but not much swelled—profuse purulent discharge—no pain.

Purulent inflammation commencing in right eye—conjunctiva and sclerotica not much inflamed—discharge slight—complains of pricking pain in the eye, which prevents sleep. Slight discharge from the urethra, with excoriation of the glans and inner surface of the prepuce. Health much impaired—general feverishness, with pains in the joints.

Has had gonorrhœa for the last two months. When gonorrhœa appeared, took Leake's pills for six weeks. The ardor urinæ and discharge diminished, but a fortnight ago the left eye became inflamed. He continued the pills for three or four days but the eye becoming rapidly worse, he went to a medical practitioner, who applied four leeches to the temple; the leeches were repeated at short intervals to the number of twenty, and a blister was applied behind the ear. Two days ago the right eye became affected, and he was ordered by the same gentleman the same application of four leeches! He states that the disease commenced in the left eye in a manner precisely similar to that in which it appears in the right; the swelling of the lids and discharge came on about the fourth or fifth day, and gradually increased, attended with a throbbing pain, till the eye burst, when all diminished. The discharge from the urethra has gradually lessened since the left eye became affected. He is not aware of having transferred the gonorrhœal matter in any way to the eye; he had gonorrhœa once previously, but it was unaccompanied with any ophthalmic inflammation.

Unguent. nigrum oculo dextro. Lotio aluminis oculo sinistro. Pulv. jalapæ comp. ʒj.

11th. Says his right eye is quite free from the pricking sensation before experienced—redness not much diminished.

To foment the eye with tepid water.

12th. Inflammation of right eye much less, sight stronger, and he is surprised to hear that the application of the ung. nig. is again necessary. Discharge from left eye diminished. *P.*

14th. Inflammation now so trifling that the application of the ointment is omitted to day.

Pulv. jalap. comp. ʒj.

17th. Right eye nearly well—no pain in left.

Guttæ argent. nit. (gr. viij. *ad* ℥ʒj.) *oculis ambis.*

Sept. 2d. Left eye has been gradually improving—right quite well.

Case 7.—*Gonorrhœal Ophthalmia cured by black ointment.*

James Griffiths, æt. 19, admitted Nov. 17th, 1831.

Both eyes inflamed—conjunctiva very vascular and slightly chemosed—corneæ and iris healthy, but sight dim—not much pain. Has had gonorrhœa, for a fortnight, and the discharge from the urethra still exists, but has lately much diminished. The eyes have been hot, itchy, and uncomfortable for the last week, but inflamed for two days only; the inflammation rapidly becoming worse, he came to this hospital.

Ung. nigrum oculis ambis. Hyd. sub. gr. vj. *c. Mag. sulph postea.*

The ointment and pills were repeated on the 18th and 19th.

20th. Very much better—no remaining inflammation, save a slight increase of vascularity of the palpebral conjunctivæ—still slight discharge from the urethra.

Omr. ung. nigrum. Guttæ arg. nit. (gr. vj. *ad* ℥ʒj.)

21st. *Rep. guttæ.*

23d. Well—dismissed.

Case 8.—*Gonorrhœal Ophthalmia—frequent Relapses—cured.*

John Haynes, æt. 21, admitted Nov. 27th, 1831. Conjunctiva and sclerotica of right eye exceedingly vascular, with slight chemosis—cornea dim with small ulcer in its centre—iris darker than that of the other eye, but pupil regular and acting freely. Lids much swollen and inflamed, so that he cannot open the eye so widely as the left. Constant discharge of hot tears, but no purulent matter. Eye feels very hot and uneasy, but is free from pain—sight very dim. Slight discharge from the urethra without scalding.

Has had gonorrhœa for six weeks and taken copaiba. Inflammation of the eye came on three days ago. He thinks it was caused by dirt getting into the eye, as the sensation was similar to what such would produce, but no extraneous sub-

stance could be found on examination. The inflammation has been gradually increasing.

Ung. nigrum oculo. Hyd. sub. gr. vj. *statim. Posteà Pulv. jal. c.*

28th. Eye feels much easier and cooler; epiphora diminished; redness much as yesterday—ointment caused pain for two hours.

Rep. ung. c. pil.

29th. Better—less redness—no pain.

Rep. omnia.

30th. Inflammation of conjunctiva much diminished—iris and cornea not improved in the same proportion—no pain—sight much clearer—bowels well open.

Rep. omnia.

Dec. 1st. Improving—cornea clearer—ulcer not so distinct—purged. *P.*

2d. Going on well. Cornea brighter—iris of natural color—chief vascularity at margin of cornea. Eyelids still much inflamed, and urethral discharge continues. *P.*

On the 5th the improvement was such that the ointment was discontinued, and the solution of nitrate of silver applied night and morning. On the 12th nothing remained but a slight inflammation of the palpebral conjunctiva. On the morning of the 13th the whole conjunctiva was found to be inflamed, with epiphora, but no pain.

Ung. nigrum. Pulv. jalap. c.

14th. No redness this morning; slight discharge of tears.

Resumr. guttæ argent. nit.

19th. Came to-day with left eye inflamed. On the evening of the 17th he first felt the eye uneasy, the uneasiness rapidly increased and now the conjunctiva and sclerotica are much increased—cornea and its iris natural—heat and pricking pain in the eye.

Ung. nig. Pulv. jal. comp.

20th. Better—less inflammation—very little pain.

Cal. gr. vj. *h. n. Mag. sulph. crà.*

23d. Not so well. Conjunctiva and sclerotica more inflamed—lids swollen—epiphora—eye feels hot and heavy.

Ung. nigrum. Ant. tart. gr. ij. *c. Mag. sulph.* ℥ss.

24th. Emeto-purgative operated.—Very little inflammation, save of palpebral conjunctiva.

Cupri sulph. palpeb.

We need not pursue the details farther. The patient was cured, but several slight relapses occurred.

These are all the cases of gonorrhœal ophthalmia entered in the books, as having been treated at the hospital within the last nine months. They are taken indiscriminately, and will serve, perhaps, to dispel the prejudices of those, who look upon the stimulating plan of treatment as a dangerous and unnatural innovation on the vested rights of leeches and phlebotomists. We can only judge of the merits of a particular mode of practice by comparing it with other modes. The most strenuous advocate of depletion could hardly choose a better text-book than the work of Mr. Lawrence on Gonorrhœal Ophthalmia The amount of depletion resorted to in many of the cases treated and recorded by that gentleman is enormous. Patients were almost brought to the verge of the grave by the lancet, yet the inflammation of the eye went on, in too many to the destruction of the organ. It surely is a cutting satire on depletion, when its warmest advocate publishes a collection of cases in which it is employed with almost uniform want of success. If any gentlemen feel a doubt of the comparative safety and value of stimulants and depletion, we would recommend them to place side by side, and carefully compare, the foregoing cases reported from this hospital, with the long list of failures in Mr. Lawrence's work.

Case 9.—*Ophthalmia Neonatorum of four weeks' duration, cured.*

Ann Jones, Æt. 5 weeks, February 24th, 1832.

Purulent ophthalmia of right eye—lids slightly swollen and red, and pus pours out on their separation—cornea muddy, without ulceration. On the left eye a growth of conjunctiva overlapping the lower edge of the cornea.

Right eye affected four weeks. Left eye was affected at same time, but was relieved by the medical gentleman in attendance. Mother states that she was affected with leucorrhœa previous to delivery. *Ung. nigrum.*

Alum lotion to be used with syringe.

25th. Less inflammation—less discharge.

P. ol. ric. ʒj.

27th. Did not bring the child yesterday—doing well.

28th. Not so well.

Omr. ung.—Appr. lot. argent. nit. (gr. iv. *ad* ℥j.) *P. c. lot. aluminis.*

On the next day the discharge was completely gone, and the inflammation very slight. The lotion of the nitrate of silver was continued. On the 4th March, the child was discharged cured.

Case 10.—*Ophthalmia Neonatorum, of nearly five weeks' duration, cured.*

Maria Lawrence, aged five weeks, March 9th, 1832. Purulent ophthalmia of both eyes—lids much swollen and inflamed—pus pours out on their separation—corneæ scarcely visible; they appear muddy, but without ulceration.

The nurse perceived discharge from the child's eyes a few days after its birth; but nothing appears to have been done. The mother had leucorrhœa at delivery.

Unguent. nigrum. Lotio aluminis frequentius.

On the 10th the child was not brought. On the 11th, the discharge from both eyes was less—lids still swollen.

P. ol. ric. ʒj.

12th. Discharge gone—scarcely any inflammation—an ulcer now seen on centre of cornea of right eye. *P.*

13th. Improving. Opens its eyes a little, and lids less thickened. *P.*

27th. Improving—right cornea still muddy.

Solut. argent. nit. (gr. viij. *ad* ℥j.) *vice ung. nigri. P. c. Solutione aluminis.*

26th. Ulceration of the cornea healing. The child recovered perfectly.

Case 11.—*Purulent Inflammation, with Ulcer of Cornea, cured.*

John May, aged three weeks, Feb. 13th, 1832. Lids of both eyes much swollen—great purulent discharge from between them—intolerance of light, but can open the eyes a little. The

cornea of right eye muddy and much ulcerated—that of left clear. Is stated to have had bad eyes since his birth. For the first two or three days there was a discharge of scalding tears, afterwards of purulent matter.

Unguent. nigrum. Lotio aluminis. Ol. ric. ʒj. *cras mane.*

15th. Better—less discharge—ulcer of left cornea healing.

Rep. ung. nig. et lotio et ol. ric.

20th. Has not been here since 15th. Eyes better. Cornea of right eye clearing, and ulcer not so deep—left nearly well. Less discharge.

Guttæ arg. nit. (gr. vj. *ad* ℥j.) *o. mane. P. c. lot. aluminis.*

This patient, we believe did very well, and was dismissed soon afterwards cured.

Case 12.—*Gonorrhœal Ophthalmia.*

George Taylor, Æt. 21, admitted 26th December, 1831, with all the appearances of severe gonorrhœal ophthalmia in the right eye. The lids are red and swollen, and there is a plentiful discharge of thick purulent matter. On raising the lids the conjunctiva is seen red, and in a state of chemosis, so that the cornea is considerably below the level, and its edge is supposed to be slightly ulcerated—the centre remains perfectly clear. Some weeks ago—eight or nine—he remembers to have observed a discharge from the urethra, which produced no scalding or inconvenience ; he took a few doses of salts, and in about ten days it disappeared. The urethra at the present time seems slightly inflamed, but there is no discharge observable. Nine days ago he felt a pain in his head, and if he stooped, or moved his head quickly, an intolerable sense of weight over the right eye, and the next day matter was discharged from it. On the third day he was unable to work, and an old woman recommended him to apply two leeches to the lower lid and a blister behind the ear, also to apply a cold poultice—by which he thinks the swelling of the lids was somewhat diminished—he also took salts and senna every day up to yesterday.

Appl. c. c. tempor. ad ℥xx. *Calomel,* gr. vj. *c. Opio* gr. j. *h. s. s. Magn. sulph.* ℥j. *cras mane. A lotion, with two grains of alum to the ounce, to be frequently injected.*

Mr. Guthrie turned out the thickened and vascular lids, and with a camel-hair pencil applied the black ointment freely over the whole surface of the inflamed conjunctiva, which appeared whitened after a few minutes by the application.

6, P. M. He has lost full ℥xx. of blood; the chemosed conjunctiva looks pale and flabby instead of the turgid and red appearance it had. The injection has been used, and the discharge appears less copious.

Dec. 27th. There is a sensible improvement in the case. The tumefaction of the lids has in a great measure subsided; the discharge is less, and he is free from pain; the chemosis is considerably reduced, and the conjunctiva has almost entirely lost its red and turgid appearance.

Rep. magn. sulph. Cont. lotio. He has been freely purged.

Dec. 28th. The chemosis has nearly subsided, the edges of the cornea are seen to be regular, the discharge is much diminished, and altogether there is the most decided improvement. The lids are still thick and vascular. He has used the lotion frequently, and has been freely purged by his medicine. The ointment has been applied to-day, but not quite so freely as before. Pills and salts repeated.

Dec. 29th. There is little perceptible change; he is going on well however. The black ointment has been applied.

31st. Continues improving.

Jan. 4th, 1832. He continues to improve. The swelling of the lids is abating, as is the inflammation. He is free from pain.

The black ointment has been applied.

6th. He is better; the redness of the conjunctiva seems to arise more from the lids having become granulated than inflammation. The black ointment has been omitted, and the sulphate of copper applied gently to both sides, with a drop of oil to each eye.

III. Strumous Ophthalmia.

There can be little doubt that many of the inflammatory affections of the textures of the eye are more or less modified by scrofula. But two particular affections would seem to be more

frequently than others produced by this agency, or at least occur oftener in scrofulous subjects. These are the strumous inflammation of the cornea and its conjunctival covering, and the formation of little vesicles or pustules at the margin of the cornea. In both these affections, especially in the former, there is usually great epiphora and intolerance of light, these being in fact the most distressing symptoms. Yet we not unfrequently see the pustular or phlyctenular ophthalmia with scarcely any increase of lachrymation or intolerance of light. Such cases are managed without difficulty. In our present state of knowledge it would be an arbitrary and unjust decision to pronounce these the only scrofulous affections of the eye. Ulcers of the cornea, for instance, with very little corneitis, are sufficiently common in scrofulous children to justify us in suspecting the scrofulous habit as their cause. At present, however, we restrict ourselves to strumous corneitis and phlyctenular inflammation.

Case 13.—*Pustular Ophthalmia cured by the Oxymuriate Lotion.*

Daniel Burns, Æt. 5, April 9, 1832. This patient has been at the hospital formerly, but owing to some circumstance or other discontinued his attendance till the present time. He has now strumous ophthalmia of left eye, with marginal pustules. Vascularity not very great—much epiphora and intolerance. Catarrhal inflammation of right eye without pustules. Is a stout child, but is ill fed, and has evident derangement of the digestive organs.

Left eye has been affected four days—right eye for a fortnight. Nothing has been done for him.

Pulv. cal. c. scammoneâ, gr. vi. *h. n. Mag. sulph. crà. Lot. hyd. oxymur. sœpe indies oculis. Ung. flavum.*

11th. Much improved. *P.*

16th. Merely slight intolerance. *P.*

30th. No pustules or phlyctenalæ—no epiphora nor intolerance. Merely a little weakness of right. To have some lotion. Dismissed.

We might detail several other cases in which a lotion of the oxymuriate or sulphate of zinc, or nitrate of silver, speedily removed this pustular affection. A moderately stimulating treatment with attention to the bowels will usually remove the present affection, but the tendency to relapse is not so easily got rid of. This can only be counteracted, of course, by what is calculated to improve the state of system upon which it depends.

Strumous corneitis is more severe, more mischievous in its effects, and more difficult to manage, than the preceding affection. It is singular, however, how instantaneously patients will frequently be relieved of the acute symptoms. A patient will be suffering to the utmost degree, unable to open the lids or allow them to be opened, with deluges of scalding tears streaming down the cheeks, and considerable sympathetic fever, when suddenly, under the effect of medicine, these distressing symptoms will be dispelled as by a charm, and merely a little vascularity and weakness of the eye remain. Such patients, like the former, are very liable to relapse, and this tendency to sudden exacerbations and remissions it is, which has contributed to confer on particular modes of treatment, both empirical and professional, a degree of reputation which they do not in general deserve. At one time an emetic, at another an active purgative, or a blister, or hyosciamus, or calomel and opium, will achieve an almost miraculous cure, to the astonishment of the patient and the great credit of the remedy. It is difficult, perhaps it is impossible, to point out the modifications which call for these various modes of treatment. In the present instance we shall merely record some cases illustrative of the characters of this singular complaint.

Case 14.—*Strumous Corneitis, with Ulcers at Margin of Cornea—result not known.*

Charles Angler, æt. 10, Dec. 21, 1831. Profuse flow of tears, not scalding, from right eye—great aversion to the light—on opening them near the light, sneezing—some conjunctival inflammation—an ulcer on the inferior and inner margin of cornea, with red vessels running towards it. More conjunctival inflammation of left eye, the cornea of which is muddy and reddish

—an ulcer at its outer and superior part. Patient of a strumous habit.

Right eye was affected with inflammation three years ago—present attack of three months' duration; it came on gradually.

C. c. ad ℥viij. *temporibus. Pulv. jalap c.* ℈ij. *Appr. cup. sulph.*

26th. Better—less irritation. *P.*

28th. More intolerance of light and greater inflammation of conjunctiva.

Emp. canth. temp. Ant. tart. gr. ij. *pro emetico.*

30th. Much better, but still considerable inflammation.

Cup. sulph. Pulv. jalap. c. ℈ij.

Jan. 2d, 1832. Eye much better—corneæ more clear—vessels of conjunctiva less red. *P.*

4th. Not so well—more intolerance of light. *P.*

A cloth wetted with one part of vinegar and ten of water to be laid upon the eye.

6th. Better since application of lotion.

9th. A relapse, attributed by his mother to his having gone out in the damp.

Emp. canth. temporibus.—Mag. sulph. ℥ss. *Ant. tart.* gr. ij. *h. n.*

11th. Not any better.

Hirud. iij. *tempor. h. n.—Rep. Mag. sulph. c. Ant. tart. crà.*

The patient was a little better at next visit, but the case is kept up no further.

Case 15.—*Corneitis, with Marginal Pustules and Interstitial Deposition in the Cornea.*

Mary Lee, æt. 3, Jan. 28th, 1832. Conjunctival inflammation of left eye—pustule at inner margin of cornea, with red vessels running to it—muddiness of cornea—interstitial deposition, apparently commencing in centre—intolerance of light—excoriations about the lids, and vessels of the upper one enlarged.

Has had frequent attacks of inflammation of the eyes for the last four months. Present affection came on suddenly within the last week.

Hyd. submur. gr. ij. *Quinine sulph.* gr. j. *M. 4tis horis sumend.*

21st. Conjunctival inflammation less—pustule at margin of cornea absorbed—cornea still muddy—interstitial abscess not increased. Child has rested better. *P.*

23d. Considerable conjunctival inflammation—interstitial deposition not increased.

25th. Conjunctival inflammation not increased—ulceration over the interstitial deposit, and a small quantity of matter in the anterior chamber; does not complain of much pain.

Unguent nigrum. P. c. Cal. et Quinin.

26th. Eye very much improved—ulcer looks healthy—conjunctival inflammation much reduced, and part of the hypopium absorbed.

Solut. arg. nit. (gr. viij. *ad* ℥j.) *P. c. Hyd. sub. et Quininá.*

27th. Ulcer healthy and conjunctival inflammation decreasing. *P.*

30th. Improved, and though medicine has not been given regularly, matter is becoming absorbed.

We need not follow up the case; under the foregoing plan of treatment it did well.

A very interesting case of strumous corneitis recently occurred. A scrofulous young girl, with strumous inflammation of the periosteum and bone of the right arm, had suffered, on several occasions, from inflammation of the eyes. She applied at the Ophthalmic Hospital with well marked strumous corneitis of both eyes. She was cupped and purged, and the black ointment was introduced. On the succeeding visit she was improved, and the plan was persevered with. She then had a very severe relapse. The stimulating treatment was now abandoned, and emetio-purgatives, with cold water lotions, were employed. The improvement was only temporary. The corneitis was as acute as we have ever seen it, the sympathetic fever considerable. Hyosciamus, in doses of five grains thrice daily, was next employed; it failed. The child was then put on calomel and opium. As soon as this affected her mouth, which it did in two or three days, the epiphora and intolerance disappeared, the vascularity and muddiness of the cornea sub-

sided, and, from a state of great suffering, the patient was suddenly restored to one of comparative comfort.

In another case, which is still under treatment, a similarly fortunate result was obtained by an emeto-cathartic. The intolerance and epiphora in a male child were very great, so much so, that it was impossible to ascertain the exact amount of changes in the cornea. The child had suffered more or less from the affection for a year. At first, a solution of nitrate of silver, with blisters, were employed. These failed. The tartarized antimony, with Epsom salts, was then given. After the first dose, which operated strongly, the patient was able to open his eyes, the epiphora had disappeared, and hitherto no relapse has recurred. We lately saw another case, under the immediate care of another gentleman. This appeared to have been a severe one, and we understand that several plans of treatment had been tried without success. This patient rapidly recovered under the administration of five grains of the extract of hyosciamus thrice daily. No doubt instances of this kind might be multiplied. In our next report, we shall endeavor to arrange the cases better than we are enabled to do at present, and to give such a full account of them as may prove serviceable to the professional public. Mr. Middleton has attached much importance to the sulphate of quinine. No doubt it is a valuable medicine, when given at the proper time ; but it certainly will not effect with the patients at this hospital, what it appears to do with Mr. Middleton's.

Case 16.—*Corneitis, with Pustule—Interstitial Abscess.*

Henry Lee, æt. 11, Jan. 11th, 1832. General conjunctival inflammation of the left eye—muddiness of cornea—interstitial deposition in its centre—varicose state of the veins of the upper lid. Intolerance of light—pain in the head and orbit—bowels regular.

Has been subject to frequent attacks of inflammation in the eyes. Present commenced suddenly, fourteen days ago, but has been much worse within the last five.

C. c. temp. sinist. ad ℥iv. *Hyd. submur.* gr. ij. *6tis. hor.*

12th. Much better. Can see the light without the degree of

pain formerly experienced—vascularity diminished—less pain of the head and orbit.

13th. Cornea not so muddy, but ulceration commencing in it over the interstitial deposition—conjunctival inflammation less—intolerance of light much less—pain in the eye and head diminished.

Hyd. submur. gr. ij. *bis die.*

16th. Mouth slightly affected—ulcer superficial, small, and healthy—inflammation less, and no pain.

Omr. Hyd. sub. Pulv. jalapæ c. ʒss. *Solut. argent. nit.* (gr. viij. *ad* ℥j.)

18th. Increased conjunctivitis.

P. Appr. hirud. iij. *tempori.*

20th. Inflammation of conjunctiva still considerable—ulcer healthy—pain of eye not increased—pain in the head. Leeches were not applied near enough to the eye.

C. c. temp. dext. ad ℥iij. *Hyd. sub.* gr. j. 6*tis hor.*

23d. Not much improvement.

Hyd. sub. gr. iij. 6*tis hor. Ung. argent. nit.*

27th. Improvement great, apparently from larger quantity of calomel—cornea clear, excepting over the interstitial deposition, where there is ulceration.

P. c. Hyd. sub. Solut. arg. nit. (gr. viij. *ad* ℥j.)

February 1st. Eye improved—cornea clearer—interstitial deposit almost wholly absorbed. *P.*

5th. Ulcer healing—conjunctival inflammation much less.

Omr. Hyd. sub.

℞. *Quin. sulph.* gr. ij. *bis die. P. c. Solut.*

15th. Cured and discharged.

IV. Interstitial Abscess.

Case 17.—R. Davis, Æt. 2, admitted January 17th, 1832. Interstitial abscess of the cornea, which has burst into the anterior chamber, at the bottom of which there is a small quantity of matter. The whole cornea is dim, and the abscess is situated in the centre, immediately in front of the pupil; the cornea at this point seems more prominent than natural, and ready to burst externally; the iris is very much discolored, being reddish-

brown, that of the healthy eye blue; conjunctiva and sclerotica a good deal inflamed. The child has been suffering, during the last month, under fever, accompanied with an eruption. The scales have only fallen off during the last week, and two or three red cicatrices may still be seen on the hand.

The eye was slightly inflamed before this eruptive fever; but, during its progress, the inflammation became much worse, the child appeared to suffer much pain, and would not allow the eye to be touched. At present, the little patient seems weak and irritable, but its mother says that, lately, her appetite is much improved—bowels regular. No treatment has been used to the eye.

℞. *Hyd. subm. Quinin. sulph.* āā gr. ss. *Sach.* gr. vj. *M. ft. pulv. 4tis. h. s. Appl. Emp. canth. post aurem.*

18th. Opens the eye better—conjunctiva and sclerotica less vascular—quantity of matter in the anterior chamber rather increased.

Omitt. quinin.

℞. *Hyd. submur.* gr. j. *2dis h. s.*

19th. Has taken six pills—mouth slightly affected. The eye is much less inflamed, and the child opens it wider, and will allow it to be touched: interstitial deposition rather less, and the matter in the anterior chamber diminished in quantity.

Cont. Hyd. subm. gr. j. *2dis hor.*

20th. Cornea clearer—less matter in the anterior chamber—iris of a more natural color—conjunctiva and sclerotica very slightly inflamed now. The child does not appear to suffer much. Mouth more sore.

Cont. n. a.

21st. Improving rapidly. External inflammation very slight indeed—cornea more transparent—interstitial deposite less—the quantity of matter in the anterior chamber much diminished—mouth more sore.

Cont. Hyd. subm. gr. j. *2dis h.*

23d. Mouth not more affected by the mercury—a little more inflammation of the external tunics this morning—but the iris and cornea are more natural, and the quantity of matter in the anterior chamber so small, as only to be seen on very close examination.

Hyd. subm. gr. j. 2*dis h.*

24th. Took four pills yesterday—soreness of mouth not increased—inflammation diminished.

Hyd subm. gr. j. 6*tis h.*

25th. Mouth not sore—eye much better—cornea more transparent, less deposition—no matter in the anterior chamber—very little redness.

Cont. pil. No. 4 *in die. Appl. Ext. belladonnæ, front.*

27th. Improving. Iris more dilated—took three pills yesterday—mouth rather more sore.

Rep. pil.

30th. Has taken four pills daily since the last date; the mouth, however, is not so sore as it was. The slight superficial ulceration of the cornea is healing. No matter in the anterior chamber—iris nearly of a natural color—pupil rather contracted.

Omit. Cal.

From this period she took quinine as a tonic, and had the belladonna applied to dilate the iris.

V. Ulcer of the Cornea.

There appeared to be several very distinct kinds of ulceration of the cornea, originating probably in different conditions of the system as well as of the part. It is very common in scrofulous children, and a great number of such cases are observed and treated at the Infirmary. In many there is a single circular ulcer of the cornea, usually in its centre, attended with little increase of vascularity, and not much epiphora or intolerance. There are several such cases at the hospital at present; and all are steadily advancing to recovery under the use of solutions of the nitrate of silver, or other stimulants, with attention to the bowels, and in some the sulphate of quina. Frequently the ulcer is productive of more inconvenieuce, and is either the sequel of severe catarrhal inflammation, strumous corneitis, or a pustule at the margin of the cornea. We have several interesting cases of extensive superficial ulceration of the cornea, but as they continue under treatment we shall defer their publication till the next report.

Case 18—*Corneitis—Ulcer of the Cornea—result not determined.* Saunders Beaven, Æt. 19, Jan. 25, 1832. Considerable conjunctival inflammation of the right eye—vessels very much enlarged, and branches shooting across the cornea—this is muddy—towards inner part of cornea a rather deep ulcer of an unhealthy appearance, with very irregular edges—much epiphora, but tears feel cold—pain in the head on stooping. Slight conjunctival inflammation of left eye. States that right eye has been affected for three weeks, and that it is gradually growing worse.

Ung. nig. oculo dextro—Pulv. jalap. comp. ʒi.

26th. Less pain—conjunctival inflammation and muddiness of cornea lessened—some enlarged vessels in left eye running towards margin of cornea.

Ung. nig. oculis ambis. Mag. sulph. ʒss. *Ant. tart.* gr. j. *M.*

27th. Right eye much improved—ulcer looking healthy—left eye much benefited by the caustic—largest of the vessels destroyed.

Rep. Omnia.

30th. Still considerable conjunctival inflammation of right eye—left much better.

C. c. ad ʒxij. *temp. dext. Ung. arg. nit. oc. dext. Solut. arg. nit.* gr. viij. *ad* ℥j. *oc. sinist. Rep. Mag. sulph. c. Ant. tart.*

31st. Left eye better—right improved, but ulcer not less. Admits that this eye has been inflamed for twelve months. *P.*

Feb. 3d. Ulcer diminishing.

Cup. sulph. Pulv. jal. c. ʒj.

This case proved very obstinate and tedious. The patient was placed on mercury, but with what effect is not stated in the hospital book. We detail this incomplete case, because its very unsatisfactory issue displays the real nature of the disease, and shews practitioners what they may expect. It is not fair to record merely instances of unusually rapid cure.

Case 19.—*Ulcer of the cornea—Hypopium.*

Eliza Lait, æt. 3, Feb. 7th, 1832. Small ulcer situated near centre of cornea of left eye—cornea more conical than natural—its whole surface dull and rough, and round its margin a kind

of circular ridge, conveying the idea of the cornea having sunk below its natural level. Purulent matter in the anterior chamber. Inflammation of conjunctiva and sclerotica slight; red vessels being only discernible near the cornea, forming a pink zone around it, and some of them passing on to the cornea, and appearing to constitute the ridge alluded to. No pain, uneasiness, nor intolerance.

Eye has been inflamed three months. Six weeks ago the mother observed the first specks; and the second white spot at the bottom of the eye appeared three weeks afterwards. The eye has never been more inflamed than at present and the child has been so free from pain that the mother did not think it necessary to apply for relief.

Hyd. sub. gr. i. *Quin. sulph.* gr. i. *M. t. d. s.*

8th. *Om. Quinina. Cal.* gr. i. *duabus horis.*

13th. Mouth and gums slightly ulcerated—cornea clearer—ulcer smaller—quantity of matter in anterior chamber much diminished.

P. c. Cal. gr. j. *t. d.*

The case is not followed up in the book, but we understand that the patient did quite well.

A child was lately brought to the hospital with central circular ulcer of the cornea and hypopium; the ulcer was not over the hypopium, but the latter was mounting up towards the ulcer, and this was becoming deeper. It was almost feared that the eye could not be saved, or at least that the cornea would be penetrated by the ulcer and the usual consequences ensue. The child was put rapidly under the influence of mercury, and a solution of the nitrate of silver was at the same time employed for the ulcer. For two or three days the issue was doubtful. As soon as the system was fully under the influence of mercury, which in this instance it was, and perhaps to too great a degree, the hypopium almost suddenly disappeared. The ulcer seemed little affected by the mercury, but under the continued use of the solution of the nitrate of silver it was steadily filling up. The parents were alarmed at the salivation and deserted the hospital, but we have since ascertained that the patient recovered completely. As the details of the case were written

on the letter and this was never presented by the parents, we are unable to relate the particulars more minutely. The leading facts, are as we state them, the child having been under our own immediate charge.

There is one circumstance to which we may allude before passing to the subject of iritis. Nitrate of silver produces discoloration of the eye, the whole surface of which assumes a dirty yellow tint, far from conducive to the personal appearance of the individual. So far as Mr. Guthrie knows, this has never occurred from the application of the black ointment, but always from solutions. This may, perhaps, be an argument in favor of the employment of the former.

The following case was treated with black ointment which had been made for two years; some person having expressed doubts of the efficacy of the ointment after having been kept for so long a period.

Case 20.—William Mills, æt. 6 years, admitted October 5th, 1831. Has an interstitial ulcer on the cornea with severe conjunctival inflammation of six months duration—he suffers great pain, and the tears are hot.

Appl. Ung. argent. nit.

℞. *Ant. tart.* gr. ii. *Lotio tepid.*

7th. Better—less inflammation, and does not complain of so much pain—can bear the light very well.

Appl. Ung. a. n. Rep. Ant. tart. et lotio.

14th. Same.

17th. Better, ulcer has healed.

Gutta argent. ung. gr. viij. *ad* ℥j. *P. jalap. c.* ʒss.

19th. Much the same.

Rep. solutio.

21st. Relapse—eye not so well, great intolerance of light and flow of tears.

Appl. Ung. nig. a. a. P. jalap c. ʒi.

24th. Better.

Solutio argent.

26th. Cured.

VI. Iritis.

The three following cases of iritis were treated by the internal use of ol. terebinth.

Case 21.—Maria Walbrook, Æt. 45, admitted Dec. 2d, 1831. Left eye has been affected for six weeks, she then felt pain as if from a severe blow. The last two or three days there has been intolerance of light; sight very much impaired; pressure on the eye gives pain; subject to chronic rheumatism.

There is slight conjunctival inflammation, with a patch of vessels internal to the margin of the cornea; the pupil does not act on light, and is elongated obliquely upwards and downwards, and is irregular; the irregularity is near the inner portion, as if it arose from a partial separation; slight muddiness of the cornea: iris is not much discolored, but appears thicker than natural. This woman had a gonorrhœal discharge about eight months since; her bowels are regular.

℞. *Ol. terebinth.* ʒj. *3tiâ. q. q. h. s.*

3d. Eye is much improved, conjunctival inflammation less, and the pupil restored to nearly its natural figure, if the irregularity, as if from a portion being separated, is excepted: pupil does not act. The turpentine has produced slight giddiness and nausea.

Cont. Ol. terebinth. Appl. lot. Ext. belladonnæ.

4th. Her eye is improved; inflammation less; the pupil irregular and dilated; no intolerance of light; pain of the eye much less.

Cont. terebinth. Lot. Ext. belladonnæ.

5th. Eye better; pupil still dilated and irregular, and not acting; no pain.

Cont. med. Omit. lot. Ext. belladonnæ.

7th. Eye much better; sees more distinctly, but still the pupil is irregular and dilated; color of the iris natural. Turpentine still causes giddiness and nausea.

Cont. ol. terebinth.

9th. Increased conjunctival inflammation; the eye otherwise improved.

Appl. hirudines, No. iv. *Cont. ol. terebinth.*

10th. Conjunctival inflammation relieved by the leeches.

Cont. terebinth.

12th. Sight improved, and iris of a natural color, but the pupil does not act. *Cont.*

14th. Sight improved; pupil acts, but not so freely as it should do.

19th. Did not attend regularly between the 14th and this date. Eye is improved; sight better.

Cont. terebinth. Appl. vin. opii.

21st. Pupil acts more freely.

Omit. terebinth. Cont. v. opii.

This patient continued to attend for some time with rheumatic inflammation of the external tunics of the eye, but the treatment for the iritis terminated at this date.

Case 22.—Anne Shea, æt. 42, admitted 4th Nov. 1832. This woman has been subject to frequent attacks of rheumatism. About three weeks since her left eye was attacked with dimness; she said it appeared as if a hair was across her eye, which would go off again; then it would seem like a fog or dimness. At that time the ball of the eye ached much, and there was a great flow of tears, which were hot. The eye has continued ever since to be dim, but the tears which now flow are cooler; not much intolerance of light; iris discolored and irregular; pupil permanently dilated; redness of vessels round the cornea, which is slightly muddy; on looking through the pupil, perceive a greenish tinge; has not had any previous headach which she could refer to any particular spot. The chief pain she has felt in her head was last summer, that appeared to be rheumatic and was general. Pulse 99, rather strong—skin hot—tongue white—bowels not open.

Appl. C. c. post aurem ad ℥xvj.

℞. *Pulv. jalap. c.* ʒj. *statim.*

℞. *Ol. terebinth.* ʒj. 4*tis h. s.*

5th. Inflammation much relieved by the cupping—pain less—bowels freely open.

Cont. ol. terebinth.

7th. The turpentine produced strangury and giddiness, so as

to prevent its being given so frequently as directed, but the woman persevered. The eye is much improved.

Cont. ol. terebinth.

9th. Still greater improvement; pupil contracts on the stimulus of light, though not so much so as in a healthy state; iris less discolored. The turpentine still keeps up great irritation—vision improved.

Cont. ol. terebinth.

11th. Still better—bowels confined.

℞. *P. jalap. c.* ʒj. *Cont. ol. terebinth.*

14th. Eye improved, pupil contracted and does not act; still the patient sees more distinctly—the irritation caused by the turpentine diminishing.

Cont. ol. terebinth.

16th. Iris of a natural color; pupil contracted and motionless; no pain; sight improved.

Omit. ol. terebinth. Appl. lot. Ext. belladonnæ.

19th. Vision daily improves; still the pupil permanently contracted.

Cont. lot. belladon.

23d. Sees more distinctly—no pain, but the pupil does not act.

Lot. u. a.

30th. Remains improving as to vision, but the iris motionless.

Dec. 26th. Did not attend again till this date, when her eye was quite natural in appearance; the pupil acted properly, and her sight was quite restored.

Case 23.—Thomas Clifton, æt. 32, admitted Dec. 14th, 1831. About 11 days since found weakness of the right eye, but he continued at his work till five days since—then, in consequence of the pain in the ball of the eye, he was obliged to leave off. At present there is great pain in the ball of the eye, increased upon pressure; intolerance of light; conjunctival inflammation, and considerable redness round the margin of the cornea, iris discolored, pupil of a natural figure, but rather dilated and not acting upon light; upper eyelid hanging over the eye so as partially to close it. Cannot distinguish objects with the affected eye; has not had any syphilitic affection for

some years, and is not subject to rheumatism—attributes the present attack to cold.

Appl. C. c. temporibus ad ℥xvj.

℞. *Ol. terebinth.* ʒj. *3tia. q. q. h. s.*

15th. Relieved by the cupping.

17th. Pain less—pupil does not act—sight not much improved.

Appl. C. c. ad ℥xij. *Cont. ol. terebinth.*

18th. Pain much relieved, sees better, but still there is conjunctival inflammation; the pupil does not act; bowels regular; the turpentine produces slight giddiness.

Cont. ol. terebinth.

19th. Pain of the eye-ball less; conjunctiva still red; pupil dilated.

Cont. terebinth. V. S. ad ℥xvj.

21st. Pupil not so much dilated; pain nearly removed; none without pressure; conjunctival inflammation less; complains of irritation from the turpentine.

Cont. terebinth.

23d. Better.

Appl. Ext. belladon. Cont. terebinth.

26th. Pupil more dilated; iris less discolored; sight better.

Ol. terebinth. 6tis h. s. Appl. ext. belladon. bis die.

30th. Conjunctival inflammation wholly subdued; sees better.

Cont. med. et appl.

Jan. 2d. Sees more distinctly. *Cont.*

4th. Pupil more dilated, and those of the left eye affected by the use of the belladonna, so as to impair vision.

Omit. belladon. Cont, terebinth.

6th. Improving; pupil not so much dilated; vision improved; iris of natural color. *Cont.*

13th. Iris of a natural color, and acts regularly; vision restored. Discharged cured.

The following cases of iritis were treated by the exhibition of calomel.

Case 24.—Thomas Down, æt. 61, admitted 1st Dec. 1831. He states that, on Tuesday week last, he experienced itching of the right eye, which was followed by dimness and pain, with

flow of scalding tears, and great intolerance of light. The conjunctiva very vascular and red, the iris discolored, and the pupil contracted and fixed; there is a patch of lymph clouding the inferior part of the iris. He has not had gonorrhœa or syphilis for 30 years. He complains of great pain on the slightest pressure.

Appl. c. c. ad ℥xvj.

℞. *Pil. hyd. subm. Ext. col. comp.* āā gr. v.

2d. Eye much the same.

℞. *Hyd. sub.* gr. ij. *Pulv. opii*, gr. ¼. *M. secund. h. sumend. Appl. ung. hydrarg. palpabræ sup.*

3d. His eye is not so well; there is a greater deposit of lymph; the iris is more irregular, and the conjunctiva is more vascular.

℞. *Hyd. submur.* gr. xxxvj. *Pulv. opii*, gr. vj. *M. et divid. in pil.* No. xij. *una secund. hor. sumend.—rept. ung. hyd.*

4th. His eye is rather better; there is not so much deposit of lymph; less conjunctival inflammation; does not suffer so much pain; mouth slightly affected by the calomel.

Rept. pil. No. 1, 6*tis h.—cont. appl. ung. hyd.*

5th. His eye is not quite so well; the deposit of lymph surrounds the pupil, but is thicker on its inferior margin, partly closing it. The conjunctiva is much the same.

Rept. pil. 4*tis h. s. Rept. ung. hyd.*

6th. His eye is better; there is not so much deposit; the conjunctiva is less inflamed; he complains greatly of his mouth, which is very sore; his bowels are much irritated and painful.

℞. *Ex. opii*, gr. ij. *statim. sumend. Magn. sulph.* ℥j. *cras mane. Appl. ung. hyd.* āā.

15th. Eye is much better, the deposit of lymph is nearly absorbed, the pupil is becoming more regular, and the iris is resuming its natural color. He has not attended since the 6th, as his face was so much swollen.

℞. *Magn. sulph. Rept. ung. hyd.*

19th. His eye continues to improve; the deposit is less, and the inflammation has subsided. The pupil is still contracted and fixed, but the color of the iris improves.

Appl. belladon.

21st. He continues to improve; the iris has resumed its natural color, except at its under margin, where it adheres to the capsule of the lens, making the pupil contracted at that part—the superior portion of the iris being obedient to light.

Appl. belladon. ℞. *Magn. sulph.* ℥j.

23d. The iris adheres to the capsule of the lens, and the pupil remains contracted. The lens is getting opaque.

Appl. belladonnæ.

Jan. 4th. The iritis is cured; he merely attends at present for the application of the belladonnæ, to dilate the pupil.

Case 25.—Martha Watson, Æt. 27, admitted Jan. 3d, 1832. Two months back she had ulcer on the nates, buboes in the groin and ulcerated sore throat, for which she took mercury for a week, and it produced ptyalism, when the chancre and the ulcers in her throat healed, and the buboes in the groin disappeared.

About 14 days since her left eye became very painful; her sight failed her, and there was great intolerance of light; and about eight days back she observed an eruption over her thighs and arms, the throat again ulcerated, and also the ulcer, which now discharges a little. She has applied eight leeches to the eye without benefit.

The conjunctiva is much inflamed, with a zone of vessels surrounding the cornea, the margin of which appears disposed to ulcerate, especially at its superior portion; the cornea is muddy; the iris discolored; pupil fixed and irregular, but not contracted; there is lymph clouding the inferior part of the iris, and great intolerance of light. She suffers acute pain, particularly on pressure, and there is a flow of scalding tears. There is a swelling on the forehead over the right eye, which gives great pain.

℞. *Hyd. subm.* gr. ij. 2*dis h. s.*

4th. Her eye is rather better; there is less pain and intolerance of light; the appearance of the eye unaltered. The spots upon the thighs and arms are large, copper-colored, and scaly; they first come out as small, itching, and irritable pimples, and when they subsided, the eruption assumed the present appearance.

5th. Her eye is a little better; she is free from pain; the flow of tears has abated, and the intolerance of light is less.

The appearance of the eye not changed—her mouth is becoming sore.

℞. *Hyd. sub.* gr. ij. *Ext. opii*, gr. ss. *M. 6tis h. s.*

6th. She continues to improve; her mouth is sore.

℞. *Hyd. subm.* gr. iij. *Ext. opii*, gr. ¼, *M. nocta maneque sumenda.*

7th. She is much better; there is not so much conjunctival inflammation, and the flow of tears has ceased; the intolerance of light is much less.—Throat better, chancre healed up, and the swelling on the forehead has subsided. Her mouth still under effects of calomel.

Cont. pil. bis die.

8th. Her eye improves, the lymph clouding the iris is not so thick as it was; the pupil is more sensible; throat nearly well; bowels affected by the medicine.

℞. *Hyd. subm.* gr. iij. *Ext. opii*, gr. j. *nocte maneque.*

9th. Continues to improve—mouth very sore.

℞. *Hyd. subm.* gr. iij. *Ext. opii*, gr. ¼, *nocte.*

11th. Idem. 13th. Still improves.

Rep. pil.

16th. She is much better, the eye being quite free from pain; her mouth is very sore; not any deposit of lymph; but the iris adheres to the capsule of the lens, at its inner and under portion.

Omit. Hyd. sub. Appl. Belladonna.

VII. Amaurosis.

Among the cases entered under this head, is one where the patient could only distinguish one side of any object she looked at.

Case 26.—Sarah Minching, Æt. 27, was admitted April 13th, 1832. The patient states that, on awaking one morning, she was surprised to find she could only see the left half of an object; and that it made no difference which eye she looked with, or if she looked with both it was still the same. Her eyesight

was perfectly good when she went to bed on the previous night. Works a great deal with her needle—had no unusual quantity of work before this attack—had no pain in the eyes or giddiness—catamenia regular. Was attacked with this affection of the eyes fourteen days since.

℞. *Mag. sulph.* ℥ss. *Ant. tart.* gr. ij. ***quaque secunda nocte sumend.***

16th. States that she sees clearer ; can see both the left and right side of an object, but the right is very dim and indistinct. Is much affected by a strong light. *Rep. med.*

18th. The dimness is still very great, and she states that her sight is no better than when last seen.

Rep. Mag. sulph. et Ant. tart.

23d. States her sight to be considerably better, and she can distinguish the right side of an object much more distinctly. In the evening she does not feel any inconvenience. *Rep. med.*

25th. Much the same as when last seen—sight not improved. *Cont.*

30th. Has continued the medicine since last report, and is now perfectly recovered—can see both sides of an object distinctly. Discharged.

VIII. Cataract.

Of the operations for cataract, two were for depression.

Case 27.—Joseph Proctor, æt. 22, Jan. 30th, 1832. Capsular cataract from injury when he was five years old. Mr. Guthrie separated the capsule from its adhesions, and depressed it. Slight attack of inflammation followed, which the usual antiphlogistic remedies overcame ; and, on the 4th of February, he was discharged, the cataract having become almost entirely absorbed, and since that period has been completely.

Case 28.—Edward Collins, æt. 13 months, May 21st, 1832, with capsulo-lenticular cataract of the right eye.

Mr. Guthrie depressed the cataract, and the case did well—was discharged from hospital the following day, and has since gone on very well.

There have been six patients operated on for breaking up the cataract.

Case 29—James Stockman, Æt. 25, Jan. 27th, 1832. Capsular cataract of the right eye, first noticed ten months since.

Mr. Guthrie separated the adhesions of the capsule with the iris, and broke up the cataract. He was discharged on the 1st Feb. The capsule still seen floating, but it was ultimately absorbed without further operation.

Case 30.—Edward Madle, æt. 25, Jan. 27th, 1832. Capsulo-lenticular cataract of the left eye, the right eye being perfectly sound. He did not notice the gradual formation of the cataract.

Mr. Guthrie broke up the cataract; partial absorption took place. On the 29th Feb. he was again operated upon; much more of the lens became absorbed after this; but, May 20th, it was necessary again to operate, and the capsule was more freely broken up, and a slight adhesion, which it still had with the iris, separated. The cataract, after this, became so absorbed as not to interfere with vision.

During this last operation, when Mr. Guthrie separated the capsule from the iris, the iris at that portion, instantly became changed in color, becoming quite green, and this, on the following day, had spread over the whole iris; so that, as to color, it had the appearance of acute inflammation.

Case 31.—Ellen Mills, æt. 15; 1st February, 1832. Soft cataract of both eyes.

Mr. Guthrie operated on the right eye by breaking up the lens. After the operation, a considerable portion was absorbed; but it required that the lens shald be further broken up, and, on 29th Feb. the operation was repeated.

On the 5th March she was discharged, and afterwards attended a short time as an out-patient—the lens was completely absorbed.

Case 32.—Thomas Sewiss, æt. 10, Feb. 1st, 1832, with congenital cataracts of both eyes. His father stated that his sight was first affected seven years ago, but that it was only two years since he became quite blind. His mother's father brought him to the hospital, and was affected in a similar manner in both eyes.

Mr. Guthrie broke up the cataracts in both eyes. The cataracts did not appear to have been much absorbed after this operation; therefore, on the 29th February, the operation was repeated in both eyes, after which much more of the lens in each eye became absorbed. But still portions of the hardened capsule required a third operation in either eye; but this was quite successful, the boy's vision being restored by the complete absorption of the cataracts.

Case 33.—Jane Brazier, æt. 5, May 5th, 1832. Congenital cataract of both eyes.

The operation for breaking up the lens and capsule was performed in both eyes. Slight constitutional irritation succeeded the operation, but no local inflammation; she was discharged in a few days, absorption of the cataracts going on rapidly, *(see W. Hoole's case.)*

There were six operations for extraction of the lens.

Case 34.—Mary Sullen, æt. 65, 1st Feb. 1832. Hard cataract of the left eye—the right lens is also becoming opaque.

Mr. Guthrie extracted the lens, making the section of the cornea upwards. Slight inflammation followed the operation, which was subdued easily; and, on the 6th February, the eye was quite free from inflammation, cornea had united smoothly, pupil regular, and can see with the eye very well.

Case 35.—Sophia Williams, Æt. 60, 29th February, 1832, with hard cataracts of both eyes. Cannot see any thing with the right, and but faintly with the left. The cataract was removed from the right eye, by extracting the upper section of the cornea. There was, for several days, some inflammation, but this was subdued, and the eye became quiet, and she was discharged 20th March, and could see pretty well.

Case 36.—Charlotte Richards, Æt. 45, March 14th, 1832. Cataract of both eyes, the left more advanced, and Mr. Guthrie removed the hardened lens in the usual manner; the usual after-treatment was adopted, and she was discharged 24th March; but her sight was rather imperfect, on account of chronic conjunctival inflammation.

Case 37.—James Stovey, Æt. 72, April 25th, 1832. Had cataract of the right eye. The operation was performed in the usual manner; but on the 2d of May, after having gone on well till then, great inflammation was set up from cold; he is now, (June 1st) in Hospital, the cornea having suffered from the inflammation, and being opaque.

Case 38.—Harriet Highfield, æt. 58, May 4th, 1832. Hard cataract of the right eye—lens of the left becoming opaque. The right lens extracted in the usual manner. There was very little after-treatment necessary, the local and constitutional symptoms being mild, and on the 13th she was discharged cured.

Case 39.—David Silver, Æt. 68, admitted 19th March, 1832, with hard cataract of the left eye, and incipient cataract of the right.

On the 23d, Mr. Guthrie performed the operation of extraction in the usual manner. The operation was succeeded by violent inflammation, and although the lancet was freely used, suppuration ensued. The patient did not complain of any pain during the inflammation.

The next case should have been inserted with those where the cataract was broken up.

Case 40.—W. Hoole, Æt. 67; March 2d, 1832. Mr. Guthrie broke up a capsular cataract of the left eye, which the patient had noticed only for six months; then followed considerable fever and local inflammation, and, on the 28th of May, the report states there is still slight conjunctival inflammation; the pupil is clear, and his sight improving daily. He was then discharged.

Case 41.—There was one case of milky cataract. The patient, a man of the name of Evan Davies, was operated upon on the 2d March, 1832, but he will require a further operation before he recovers the use of that eye.

[From the Medico-Chirurgical Review, Oct. 1831.]

On Spinal and Spino-Gangleal Irritation.

BY W. R. WHATTON, ESQ.

This is a practical dissertation, of considerable length and much merit, published in our North of England contemporary, on disease which has lately attracted a good deal of notice, but not more than it deserves. The author of this paper says, that the authority of Mr. Pott's name and opinion has, unfortunately, put a stop to inquiry respecting diseases of the spine—most surgeons after his time concluding at once, that all forms of spinal disease sprung from the same strumous source—caries of the vertebræ. Hence, he thinks, our diagnosis has been attended with confusion—our plans of treatment sometimes, useless, sometimes even injurious. "No person, for instance, in these days, thinks of curing lateral curvature through the medium of caustic issues, while, on the other hand, caries is but seldom treated without them." After making a quotation from Copeland, where that surgeon regards pain on pressure, or increased sensibility to external heat, as indicative of spinal disease, Mr. Whatton observes as follows :—

"In the early stages of caries, as well as of lateral curvature, acute pain on pressure of the spinous processes of the vertebræ is rare, and when any great degree of increased sensation does exist in these parts, during the progress of the former disease, it does not occur until the bodies of the vertebræ are considerably affected, until the curve is formed, or until the processes have partaken, in common with the other neighboring parts, in the consequences of the disorder.

"In cases of Spinal Irritation, on the contrary, this symptom is always one of the first and most constant, and it was in such cases, I apprehend, that the application of heat produced the severe uneasiness spoken of by Mr. Copeland. That gentleman constantly made use of this expedient, afterwards, for the detection of the early symptoms in cases of diseased Spine indiscriminately, and hence it followed, 'that he was unable to

reduce the result to any given rules; and that sometimes he expected a great degree of pain, and it did not occur, while at other times, it took place where he least expected it.'

"In those diseases commonly termed psoas abscess also, whether arising from affection of the ligaments of the Spine, or of the intervertebral fibro-cartilages, or from caries of the bodies of the vertebræ themselves, there is scarcely ever any acute pain referable to the spinous processes of the back; and the symptoms are not unfrequently so very equivocal, that the true nature of the complaint is often overlooked or mistaken.

"In many cases of caries, indeed, the patients do not experience sufficient uneasiness, at the time of the setting in of the complaint, to induce them to notice their situation, and instances have occurred to me, in which the usual symptoms had been so entirely unnoticed, that there was no suspicion of the complaint existing, previous to the actual discovery of the curvature.—Not so, however, in Irritation of the nerves of the spine.

"In the writings of Messrs. Baynton, Wilson, Harrison, Shaw, and Dods, I do not perceive any notice of this affection; and it is not improbable that, as these gentlemen wrote expressly on the lateral curvature, they did not think it necessary to direct their attention to the various diagnostic appearances which characterize Spinal Irritation, or that it had escaped their observation altogether, as a separate form of disease, and had, perhaps, in some instances, even been taken for the earlier stages of distortion.

"However this may be, it is certain that there does exist a wide difference between these two forms of disease, each originating in a separate and distinct tissue, assuming a distinct type, and being followed by different sequels.

"In cases of Irritation, the most prominent and characteristic symptom is the highly painful sensation produced by pressure on the points of the vertebræ, in that division of the spine where the disease is supposed to reside; *and this symptom is never wanting.* Its occurrence is to be explained, I presume, by the supposition that the irritation has already extended itself along the posterior nervous twigs, supplying the processes and arches of the vertebræ, and the numerous muscles and ligaments

attached to them ;—and its early appearance is easily understood, when we recollect that these twigs are the first which are given off by the lateral nerves on either side, and arise immediately from the spot implicated in the inflammation. There is another remarkable difference to be noticed with regard to this form of disease of the Spine. While cases of caries occur indifferently in the Spines of either sex, those of Irritation, like lateral curvature, are found chiefly among females. Of several hundred cases, which I have had opportunities of examining, I have not seen more than half a dozen occurring in male patients."

Mr. Whatton is not aware that any particular method of education, any kind of study, or any position of the body, predisposes to this complaint. He has met with it as frequently in the middle and lower classes of life as among the fashionable classes—among married females, the mothers of families, as among single ladies—rarely among girls. The youngest patient was thirteen years of age, and the oldest fifty. He had never seen it prove fatal. We shall now proceed to the—

Symptomatology.

" In slighter cases, the symptoms are mild and intermittent, and the patients are able to attend to their various avocations, without much pain or uneasiness : and it is only when attention has been excited, by inquiry into the nature of their complaint, that they become aware of the extent of the disorder.

" Irregular shooting pains in the limbs, and in the integuments and muscles of the chest and abdomen ; occasional headach and loss of appetite ; tremblings, and obscure uneasiness over the shoulders and down the back ; with a general debility and disinclination to exertion or exercise, are the signs by which this form of the disease has usually manifested itself.

" In the more urgent cases, the uneasiness becomes fixed and constant ; the tremors are alarming, and the severe darting and lancinating pains over the chest and abdomen, and through the limbs, are harrassing and intolerable. Sometimes the cases had become protracted in their duration, and the patients had suffered for months under the most aggravated forms of the com-

plaint, without any suspicion having been excited as to its real nature and origin ;—and, in other instances, mistaken views of the disease had subjected them to various kinds of treatment, totally unnecessary, and, generally, quite inadequate to the removal of the complaint. In all these cases, however, there was one symptom, which, as far as my own experience has gone, has never been absent ;—and that is a tenderness upon pressure, in some part or parts of the spinal column.

In the slight cases, this pain is not so urgent as to cause much distress, and the pressure can be borne without any great suffering or disturbance ; in others, the tenderness and excitement are so great, that, in running the finger along the spine, the instant the irritable spot is arrived at, the patient starts from under the pressure, and a degree of anguish is occasioned, so exquisite and excruciating, as frequently to produce the most violent spasms, which either go off gradually in repeated faintings, or subside into periodical and less painful dartings along the nerves running from the part which has been subjected to examination.

The darting pains correspond, in a remarkable manner, with the origin of the irritated nerves, and are very frequently found to strike through the chest, and to produce an acute smarting over the ribs and sternum, and throughout the neighboring parts, where those nerves distribute their ramifications, and supply energy and sensation.

Every part of the Spinal Cord is subject to the disease : sometimes it is observed to fix itself upon one portion, and sometimes on another ; frequently it is found existing in different portions, and occasionally over the whole column.

When the upper cervical nerves are affected by the irritation, the seat of the pain is most usually found in the suboccipital and lateral region of the cranium ; the muscles of the face and the integuments of the neck are also affected ; and there is a considerable degree of stiffness and inability to move the head and jaws. I have now and then met with a case where the pain has extended from the back part of the head, in a direct line over the skull, to the forehead, indicating a diseased state of the nerves supplying the occipital and frontalis muscles. When the

affection fixes itself in the lower cervical portion of the spine, the disease is generally announced by severe darting pains and cramps in the course of the axillary and brachial nerves, and along the upper and fore-arm, and by burning sensations, and aching of the muscles enveloping the shoulder joint, and upper and lateral parts of the chest. The severity of the pain is sometimes observed to fall upon the fore parts of the thorax, and to extend itself to the breast; the glands of which become very painful to the touch, and are sometimes indurated and enlarged. This painful state of the glands of the breasts occurs as frequently in married females as in single women, and I have not perceived any thing to indicate a suspicion that one class of females is more liable to its attacks than another.

"In these affections of the upper extremities and chest, there is usually a preternatural degree of lassitude and debility, frequent sighing, tremblings, and nervous twitchings; and sometimes also the wrists and hands are benumbed, and do not admit of their usual facility of direction. When the first division of the dorsal nerves forms the seat of the malady, we have the same painful shootings along the course of the anterior branches supplying the intercostal muscles, and edges of the ribs and sternum and the upper parts of the epigastrium; and great soreness and aching in the ramifications of the posterior branches which go to the integuments and muscles behind the chest.

"In the lower division, there is great pain around the abdomen and over the stomach; a feeling of soreness and smarting along the ribs; tightness around the chest, with frequently a considerable degree of loss of sensation and energy in the intercostal muscles;—these latter symptoms, with consequent dyspnœa, and a burning sensation over the sternum, and at the point of the xyphoid cartilage are, I think, never absent in well-marked cases of irritation of the dorsal nerves.

"Atony of the abdominal muscles, causing much uneasiness and difficulty in expelling the contents of the bladder and rectum, is a constant symptom; and irregular pains, and sometimes partial paralysis in the integuments covering the lateral parts of the belly and thighs.

"In the lumbar nerves, we have severe aching in the region of the loins, soreness over the skin and muscles of the genital organs and upper part of the tnighs; painful and spasmodic dartings along the crural nerves, and down to the ancles and feet, with trembling, unsteadiness, and loss of power, similar to what is observed in the upper extremities. And in affections of the sacral nerves, the sacro-spinales and glutei muscles are found to partake in the disease, and the parts in the neighborhood of the perineum.

"In some acute cases of Irritation of the roots of the Spinal Nerves, or in those that have become chronic, the disease is very frequently seen to extend itself through the medium of the communicating branches, to the ganglial system; and in addition, therefore, to those symptoms, which have just been enumerated, we have others, consisting chiefly of irregular and spasmodic action of the involuntary muscles, and of the perverted functions of those organs and viscera, which derive their nervous energy from the ganglia to which the irritation has been continued.

"When the disease has been carried from the spinal nerves of the upper part of the neck, by the correspondent branches of communication, to the cervical ganglia, the chief additional symptoms are violent and stabbing headachs, painful throbbings of the carotid and temporal arteries, and a fixed and heavy pain at the base of the skull, sometimes extending itself by the mastoid process, under the angle of the jaws, to the fore part of the neck.

"When the middle half and lower portion of these nerves are in a state of irritation, or when the disease extends itself throughout the whole of the cervical spine, as is sometimes the case, the inflammatory excitement is communicated in like manner to the cervical ganglia, and thence, downwards to the cardiac nerves and cardiac plexus.

"From this division of the ganglial system are furnished nervous branches going to the heart and lungs, to the aorta and the large blood-vessels of the parts situated within the thorax, and others which supply the involuntary muscles of these parts with their nervous energy. The heart and great blood-vessels are

affected by irregular and spasmodic action ; and are subject to various morbid and highly painful sensations ; there is frequently severe aching and distress in the act of inflating the lungs, and a remarkable sensation of paralytic depression in the attempt to expel the air. Any of these symptoms readily occur when the patient has been alarmed by a sudden or unexpected occurrence, or when she has been hurried by any little increase of exercise or mental application.

" As the disease advances, these symptoms are more frequent, more strongly marked, and are less easily removed. The intervals of freedom from the complaint gradually contract, until at last the patient becomes so irritable, and suffers such severe and continual pain, that her spirits are worn down, and she becomes weary of existence.

" Should the disease have arisen in the dorsal region of the spine, the same affection extends itself to that division of the ganglial system which gives off nerves to the organs and viscera of the abdomen. The solar plexus wholly, the semilunar ganglia singly, or the splanchnic nerves and thoracic ganglia, appear in these cases to be affected by the malady : all those parts, indeed, of the abdominal cavity in succession, which receive energy from the solar plexus or its secondary ganglia, are more or less subjected to the irritation. The diaphragm, stomach, liver and spleen, and the large and small intestines, and kidneys, as their appropriate ganglia are affected, become, in their turn, or together, liable to the encroachments of the disease.

" If the stomachic plexus be the seat of the disease, we have painful depression at the region of the præcordia, especially after taking food ; tenderness on pressing the stomach ; difficult and incomplete digestion, attended with flatulence and preternatural distention ; a feeling of anxiety about the heart, periodical and violent palpitations, and vertigo. These impressions being carried, through the medium of the cerebro-spinal connexions, to the brain, are frequently productive of sudden and distressing terrors and alarms, and the patients are occasionally tortured by the fear of apoplexy or some other fatal disease, of which, however, there is no real or perceptible indication.

"The secretions of the stomach are greatly perverted, the gastric fluid becomes sour and unfit for the perfect solution of food; and whenever an attempt is made by the patient to extricate the nauseous air, which is plentifully formed, large quantities of acid watery fluid are brought up, and temporary relief is obtained from the removal of the distention and acrimony.

"The biliary secretion in all probability too undergoes similar changes; and although the liver, perhaps, may not be endowed with a degree of sensation equal to that of the other viscera of the abdomen, yet severe pain in that organ is occasionally detected accompanying affections of the secondary ganglia of the central plexus.

"The large and small intestines, when the mesenteric plexuses form the seat of the disease, are visited with severe twistings, and painful distentions, most frequently extending over the region of the colon, and producing intolerable anguish and distress. The sensibility of these organs is also very often perverted, the filaments sent off by these plexuses to the intestines being exceedingly numerous and highly susceptible.

"In an extension of the disease from the lumbar nerves to the lower division of the ganglial system, we have painful affections of the kidneys and uterus. The menstrual discharges are commonly interrupted, and generally profuse, especially when the complaint has been of some duration."

We could not abbreviate, without injury, the foregoing symptomatology, and have therefore given a long extract in the author's own words. We shall next advert to the

Treatment.

In common cases of spinal irritation the treatment is very simple. Abstraction of blood from the part where tenderness has been discovered, by leeches or cupping, generally affords relief; and this is to be repeated at intervals of three or four days, if the pains should return, as often as may be judged necessary. When the more urgent uneasiness has subsided, a small blister on each side of the affected vertebræ, or a single large one, above or below them, will be found beneficial. These must be repeated from time to time. Blisters are generally applied to

the spine too soon after leeching, by which irritation is increased rather than allayed.

" In recent and slight cases, a single bleeding, or the application of a blister, will frequently succeed in effectually removing the disease ; and I have known several instances where the complaint had been misunderstood, and had existed many months, and even years, which have given way without difficulty when the curative means were applied to the true seat of the irritation, instead of the nervous filaments, which are the seat only of the distant symptoms. Some simple aperient medicine may be given, with a view of restoring the proper functions of the stomach and bowels, if it should be required, but more than this does not appear necessary ; the depletion and blisters almost always proving sufficient for the removal of the irritation, and the restoration of the healthy functions following as a matter of course, as soon as the part has been properly relieved.

" In the Spino-ganglial Irritation the same means are to be had recourse to, and it is necessary to attend, during the progress of the cure, to the state of the irregular secretions. In some cases, where the patient suffers from severe cardialgia, and is troubled with acid and flatulent eructations, I have generally been in the habit of prescribing the carbonate of soda or potass pretty freely, along with some simple bitter infusion ; and in others, where restlessness and feverish excitement are urged, they have been allayed by the use of the liquor acetatis ammoniæ, and small doses of opium and the submuriate of mercury.

" Where the fixed pains have entirely subsided, but where there yet remains a sufficient degree of uneasiness to disturb the comfort of the patient, I have had recourse, as advised by Mr. Teale, to the use of some stimulant embrocation, which is directed to be rubbed over the spine occasionally ; such as the liniment : subcarb : ammoniæ, or camphorated oil with spirit of turpentine. These applications keeping up a degree of stimulus or moderate counter-irritation, have been productive of very good effects. The flesh-brush, mustard poultice, or warm fomentation, will likewise answer very well.

"Any debility consequent on the necessary depletion will soon be remedied by a gradual return to improved diet; and if any loss of appetite remain, the sulphate of quinine, or some of the preparations of iron may be useful; except, however, in chronic cases, or in some debilitated constitutions, these will seldom be required, and unless due attention have previously been directed to the state of the spine, they are inefficient and useless."

Some cases are detailed in illustration of the precepts here laid down, but we do not deem it necessary to insert any of them in this place. We think the paper very creditable to the practical talent of Mr. Whatton.

[From the Medico-Chirurgical Review, Oct. 1831.]

Arthritis and Sciatica, treated by Acupuncturation.

UNDER THE SUPERINTENDENCE OF MR. HAMILTON.

Case. Pat. Rosseter, Æt. 30, laborer, taken into Meath hospital, November 30, 1830; complains of pain on motion, and stiffness of both arms and wrists, not very severe, nor very tender on pressure; also severe pain, on motion, a little behind and above the left hip-joint. He walks lamely and with difficulty, not being able to move the thigh, or put his foot firmly to the ground, without great pain. The knees are slightly stiff and painful. None of these parts are red or swollen, and do not give pain while the man remains at rest. They are not worse at night. He attributes them to cold caught from exposure while in a profuse sweat, after a hard day's work, six weeks ago. At first a chilliness came on, and continued for a week, when the shoulders and arms became affected, and for a short time the front of the chest very severely. The pains were erratic, but did not attack the hip or knees till ten days since. Since this attack he sweats often and feels chilly. Bowels regular; appetite and sleep good; pulse full and regular; urine clear, and deposits no sediment.

3d.—In addition to his other symptoms a slight attack of pleurodyny.

℞. Vinum Sem. Colchici, ʒss.

Magnesiæ, gr. x.

Gutta Nig. gt. viij.

Aquæ Cinnam. ℥j. M. sumat ter in die.

Hir. vj. lateri; *Acupuncturation* at the affected part of the left hip.

4th.—The needle was pushed in, with considerable pain to the patient, up to the eye in an obliquely-horizontal direction, a few inches above and behind the trochanter, about where the sciatic nerve leaves the pelvis. It was withdrawn after being in 24 hours. While in, the part felt sore. Though watched some minutes after its insertion, I could not perceive any action to be produced; the patient himself observed, that he felt it moved. He considers that it has done him good, the pain and tenderness being considerably lessened. His chief cause of complaint now is the left wrist, which is stiff and painful; bowels confined; urine high-colored, but clear.

Rep. Mist. Colch.

He continued on the use of the colch; sulph. mag. being added merely on one occasion to open the bowels.

8th.—All his pains much less; and can walk with comparative ease and very little pain to what he had when he came into the hospital; is desirous of having another needle inserted, having experienced so much benefit from the first.

Cont. Colch.

9th.—Pain in the hip returning; the patient is very anxious to have another needle inserted. His other pains less.

Rep. Acupunct. et Mist. Colch.

11th.—The needle was withdrawn, leaving some degree of soreness; his other pains are so trifling that this is almost his only complaint.

Omit. Colch. et sumat Sulph. Quininæ, gr. x.

13th.—Has now no pain any where, and walks extremely well, without the least stiffness or pain.

Although colchicum was taken during the use of the needles, it is evident very little influence can be attributed to this medi-

cine in alleviating the pain in the hip. For though by its means the cure of the other pains was effected, this one, after having been greatly relieved by the first needle, began again to be severe, while the patient was still using colchicum; and a second needle was inserted, at the man's anxious request, with complete relief.

Besides this case, I have seen acupuncturation successful in three others: the first, that of Hogan, admitted Sept. 30th, 1830. This man had labored under inflammation of the anterior crural nerve for two years, and had undergone medical treatment without relief. Four needles were now inserted at intervals; and at the end of a week he was dismissed cured. It is proper to add, that for two days he used Dover's Powder and the warm bath. The second, John Darnford, under Mr. Jones' care, had labored four months under pain of the hip, with some degree of lameness, and had used blisters and cupping without relief. The second day after admission, two needles having been inserted into the hip, all pain was removed from that part, and he could walk about perfectly well, his only complaint being a pain in the ankle. The last is that of James Toole, in whom one needle removed severe pain in the hip. This patient is under Mr. Bernard's care.

Much talent and ingenuity have been vainly exercised to discover the *modus operandi* of the needle while in the living fibre; any attempt, therefore, on my part, could only end in idle speculation. I trust, however, I shall be excused for venturing to offer a few remarks of a more practical nature; first, on the best manner of inserting the needles; secondly, on the number that should be employed, and the length of time they are to be left in; and thirdly, on those cases of a rheumatic character in which they are likely to be most beneficial.

1st. It may be observed, that of the above four cases, the last two were much the most striking: the cure occupying only two days in the cases of Darnford and Toole. Many reasons might be brought forward as likely to account for this: the circumstances of the cases, &c. I am inclined, however, to attribute the speedy success of the remedy in a great measure to the different manner in which the needles were inserted. In

Darnford's case, Dr. Graves desired the direction of the second needle to be less horizontal, and the next day all pain was removed. In Toole's case, the needle used was so long, and the direction such, as to render it probable that the sciatic nerve was pierced (which Cloquet, I understand, for I could not get his book, considers desirable); the relief was even more speedy.

In Dr. Renton's hands, acupuncturation has been eminently successful, instantaneous cures having been affected in many cases of long standing and severity, and which had resisted all the other remedies employed. It is difficult to collect from his paper in the Edinburgh Med. and Surg. Journal the precise manner in which he performed the operation. The direction of the needle, however, appears to have been perpendicular, or nearly so, as he lays great stress on the piercing of the muscular fibre, and passes the needle, not up to the eye, but only to the depth of an inch, or an inch and a half, which, were the direction nearly horizontal, would scarcely be deep enough to attain his object. This much is certain, that it was done with a gentle rotatory motion, nor was any pain produced by the insertion of so many as ten needles.

Wishing to satisfy myself on this last head—the absence of pain—I inserted a needle into the centre of the calf of my leg, with a rotatory motion firmly pressing on the top, to about the depth of an inch and a half, the direction being exactly perpendicular. No *pain* was felt, the only feeling being one of great itching. What is curious is, that the needle, after having been in a minute, moved in a circular direction on its own axis; and a numb aching sensation was experienced. It was only left in a couple of minutes, and then withdrawn with some pain and difficulty, as if it had been firmly grasped by the muscular fibres. The leg was the same after as before, and the place of the puncture discovered with difficulty. Now, as pain has not been proved to be necessary to the efficacy of acupuncturation, but will often be a great obstacle to its use in cases where it would be likely to prove a safe, speedy, and efficacious remedy, the insertion of the needle by a rotatory motion—drilling, as it were—being unattended by any pain, must be considered preferable to thrusting it in, a mode which, from Pat. Rosseter's case, we may con-

ceive to be a very painful operation. Dr. Renton's cases, along with the two above-mentioned, would also go far to prove, that the more perpendicular the direction the better, in which case, too, the depth ought to be from an inch to an inch and a half.

With regard to the second point, the number of needles, and the time they are to remain in, there exists great difference of opinion. It is natural to suppose, that if one needle produces any effect, a more powerful one will be produced by many, which is in a great measure confirmed by the great success obtained by Dr. Renton, who used as many as ten in some instances, divided between the hip, thigh, and leg. Dr. Elliotson also uses a considerable number. The former gentleman only allowed them to remain in five or ten minutes; and how he succeeded has been already mentioned. On the other hand, in the Meath hospital, they are left in twenty-four hours; and Dr. Elliotson, in one of his clinical lectures, observes that, 'if needles be merely thrust in, and allowed to remain only a short time, they will in general not be found of much service; they should be left in at least two hours.' It is not easy to reconcile these differences. Most probably more depends on the manner of performing acupuncturation than on any thing else, that the shorter time they are in the benefit should prove to be the greater. If the manner be good, it very likely matters little whether the needles remain in five minutes, or twenty-four hours, as far as the effect is concerned; but it is of great consequence as regards the patient's comfort, who would no doubt sleep better without, than with, nine or ten needles sticking in his body, setting aside the soreness which usually remains after a needle has been in so long. Dr. Elliotson, in spite of having discovered the value of leaving in needles long, appears in some cases to have had more perseverance than success, as he says, 'I once ordered them daily for nine days before I succeeded.' If this and some other cases given by Dr. Elliotson, are compared with Dr. Renton's, it will be apparent that the remedy must have been differently applied. If performed in Dr. Renton's manner—that is, with half the needle out of the flesh, it is plain it would not be convenient to leave them in long; it is fortunate that there is no necessity, five or ten minutes having proved sufficient.

Lastly, Dr Elliotson, in considering the cases most likely to be benefited by acupuncturation, divides rheumatism into that attended with a sense of heat, and aggravated by its application; and that in which there is a feeling of coldness, the pain being relieved by warmth. The first of these he judges not likely to be benefited by the use of needles, but in the latter he thinks they will be found to prove very serviceable. But this distinction does not appear to have been acted on by Dr. Renton, as the case of the young woman given by him proves; nor do I recollect it to have been mentioned by Dr. Graves. It is doubtful, therefore, how far it can be considered of importance; and it would probably be better to give the needle a fair trial in all cases of sciatica."

[From the Medico-Chirurgical Review, Oct. 1831.]

On Abstinence, on Insufficient Alimentation, and their Dangers.

BY P. A. PIORRY, M. D.

Hypotheses rise and fall; but faithful observations or facts resist the hand of time. No precept has stood this test more fully than that which tells us that 'abstinence is useful in acute diseases.' Men have always a tendency to run into extremes, and carry the most salutary precepts into dangerous excesses. Our author sets out by reminding his readers that the fluids of the body exercise a great influence on the functions of the machine; and that these fluids, more especially the blood, which is the source of all the secretions, are greatly modified, not only by the quality but the quantity of our food. The organs of the body suffer from deficiency as well as from excess of their natural stimuli. In the *former* case, the blood is not carried with sufficient energy towards the brain; and what is curious, there arise, in such circumstances, symptoms very closely resembling

cerebral congestion. Pains take place in the muscles not properly supplied with stimulus to activity—the eye gets inflamed in dark places, and often is cured spontaneously by exposure to light—the stomach deprived of sufficient alimentation becomes the seat of severe pains and obstinate vomiting. The author then traces the effects of rigid abstinence (la diète absolue) and insufficient alimentation on the blood and muscles—the heart—the lungs—the digestive organs—and the nervous system.

I. On the Blood.

There is no doubt, he observes, that the first effects of rigorous and prolonged abstinence is a diminution in the quantity of the circulating fluid. Collard, of Martigny, has made many interesting experiments on this point. The proportion of fibrine diminishes in proportion to the diminution of alimentation; while albumen, on the other hand, augments. The whole volume of blood also diminishes, while the muscles decrease in size and firmness. Fourteen days of "diète absolue" were sufficient to render the muscles of the extremities exceedingly flaccid, wasted, and weak. Their constituent principles are, in fact, absorbed, to repair the loss which the blood necessarily sustains by secretion, &c. The muscles of the trunk experience a similar degree of atrophy, and our author thinks it probable that the muscular pores of the viscera undergo a similar change. The fat, and even the denser tissues of the body must, though more slowly, share the same fate, although there are instances on record where death was produced by starvation, without emaciation. We much doubt these statements. It is, however, to be recollected that increased absorption, in consequence of diminished quality of blood, is not near so great in disease as in health—nor of diseased parts so much as of sound parts. Hence it is that we may starve our patient before we produce the absorption of a morbid growth in any part of the body.

The blood diminishes but little during the first few days of sickness and abstinence, because the various organs furnish materials for the circulation, and so do the drinks taken, and even

the air we breathe. But afterwards we see the same phenomena which succeed hæmorrhages. The lips, the tongue, and the conjunctiva become pale—the veins flatten, and the circulation through them becomes slow—the arteries beat with less force—the heart diminishes in size—the chest returns a clearer sound—and the liver shrinks. The ultimate effects, too, of hæmorrhage and abstinence are the same, debility—disinclination to motion—slowness and torpor of all the functions—tendency to syncope in the erect position—and finally, death, from defect of cerebral excitation. It is thus that the scene terminates, when profound lesions of the alimentary tube obstruct assimilation—when inordinate evacuations carry off the pabulum of life—or where prolonged abstinence cuts off the supply of nutriment from the body. To deprive a patient long of food is to bleed him largely—and it would often be better to bleed him and give him nourishment at the same time, than to starve him too long. Venesection may be carried to a great extent with safety, when the alimentary tube is in a sound state, and capable of supplying chyle, when nutriment is at length given; but we should be cautious of severe depletion or rigid abstinence, when the primæ viæ are in a different condition; for then we shall find it difficult to re-establish strength when the malady is at an end.

"Would we (says M. Piorry) try to cure phthisis or cancer by starvation? This rigid regimen, by cutting off the supply of nutrition, will only hasten the fatal catastrophe! We dread irritation; but we incur still more dangerous consequences—inanition and its accompaniments. Extreme low diet (la diète absolue) will kill a dog in twenty-five or thirty days; yet we put men on this system for months!"

It is vain, says he, to tell us that the patient takes gum-water, sugared water, emulsions, &c. This is not sufficient alimentation, either for people who are sick, or those who are well. The dogs which Magendie fed on sugar, oil, butter, and gum, died in little more than thirty days of this regimen. If you wish to prolong the days of those who labour under incurable diseases, you must supply the blood with chyle. Do we not see the wound made in lithotomy heal under a nutritive diet, and

remain open if we keep the patient too low? How can we expect, then, to heal an internal ulcer by starvation? Let it also be remembered that, in internal ulcerations or malignant diseases of structure, there is an increased absorption, where rigid abstinence is enjoined, and, consequently, a vitiation of the blood. To prevent this, we ought to supply healthy chyle. We see that people who would die in town, get well in the country. No doubt there is a great deal owing to the pure air of the latter situation. But are we to attribute nothing to the increased nourishment which the change of air and scene enables the patient to take? Good wine, says the Doctor, and generous living, are the best tonics. Our estimable Pinel acknowledged that the "Vin d'Arbois" saved his life, when medicines failed. It is thus, perhaps, that the Charlatan sometimes succeeds, when the physician, with his rigid diet, sees his patient daily get worse. Our author does not accuse M. Broussais so much as his blind disciples, in starving their patients to death through the chimerical fear of irritation. "I have seen (says he) patients who had been kept fifteen, twenty, thirty days—nay, six or eight weeks, on gum-water; and to whom chicken-broth has been refused, the terror of irritation being so great, that the Doctor trembled at substituting toast-water for the crystal spring." "On other occasions (says he) certainly not numerous, but likely to be so, I have known individuals, feeble, pale, and emaciated, condemned to absolute rest, and to live for years in protracted agony (vivre, pendant plusieurs années, dans une longue agonie) on sugar and water, a small quantity of milk, &c." These errors have arisen out of an exaggerated fear of *inflammation*, rather than of irritation—for the *latter* is often increased by too rigid abstinence, debility being the parent of irritability. Sick or well, and especially in chronic maladies, there ought to be allowed a sufficient nourishment for the support of the human machine—and the quantity is to be proportioned to the age and strength of the patient—but more especially according to his former habits and his constitutional idiosyncrasy. The following picture is not imaginary.

"Take a man in perfect health, and submit him to the following regimen. Give him two or three plates of soup maigre,

(potages de quelque onces par jour)—eau sucrée for drink—and even add to this an egg. Prohibit bread and wine—and reflect on the consequences of this regimen. The sense of hunger will be only momentarily assuaged during the first few days; but afterwards it will diminish, because this sensation, like all others, is under the dominion of habit. In the course of a week or ten days, the individual will experience debility, will be thinner, and his muscles more flabby. In another week, these phenomena will be increased—and the stomach will probably become irritable, and even painful. By perseverance in this regimen, the patient (for he is now really ill) will offer all the symptoms of one who has suffered from repeated hæmorrhages."

II. On Abstinence in Diseases of the Heart.

Under the influence of abstinence, the heart, like all the other muscles, diminishes in volume—and on this fact was founded the treatment of Valsalva. This treatment is indicated in hypertrophy of the ventricles—especially when uncomplicated with contraction of the orifices. Abstinence will have no effect on this last complaint—sometimes a bad effect. Nature strengthens the muscular fibres of the heart, when they have an unnatural resistance to overcome. By diminishing the strength of the parietes we weaken the power of carrying on the circulation, without in any way removing the obstruction. It is not the violent action of the heart which we have so much to dread, as the cause which produces it. The great object, in such cases, is not so much to lessen the size of the heart, as to proportion the calibre of the arteries, and the orifices of the central organ, to the volume of blood which is in circulation, while, at the same time, we bear in mind that there is a certain force to be sustained in the various other organs of the body. Then it is that repose is necessary, in order that a smaller quantity of blood may suffice for supporting life. To diminish the quantity of the circulating fluids, and impoverish (to use an antiquated expression) the quality of the blood, is the most rational treatment in these diseases. And yet the defect of nutrition, and the general debility, which are the inevitable results, must ultimately terminate fatally. Our author thinks that detractions

of blood from the arm, by which the volume is quickly lessened and the embarrassment of the circulation relieved, are better than slow evacuations by leeches, which debilitate, without materially relieving the patient.

It is also to be remembered, that hypertrophy of the heart exists under two very different forms—one, where the muscular structure is firm and resisting—the other where it is soft and flabby. The former state appertains chiefly to youth and robustness of constitution—the *latter* to age and debility. Unfortunately, the diagnosis of these two different conditions is not so firmly established as some pathologists imagine. Auscultation has promised rather more than it has performed. "The *bruits* are very deceptive, percussion is insufficient, and the functional symptoms lead us often astray." Nevertheless, he acknowledges that auscultation, percussion and a careful observation of symptoms, may enable us to do a great deal in the mitigation of these dreadful afflictions.

In respect to those passive dilatations of the heart, with mollescence of its structure, which we so often meet with, an extreme low diet is not only inefficacious, but absolutely injurious. Even simple dilatation of the heart, whether of the right or left cavities, does not require extreme abstinence—on the contrary, the dilatation is generally increased by such procedure. Where there is reason to believe that the parieties of the organ are soft, we ought to give nourishing diet, and even tonics, especially steel.

"Of the great numbers who have applied to me for palpitation of the heart and difficulty of breathing, and who considered themselves affected with organic diseases of the heart, the greater number of them had no hypertrophy or dilatation—no stethoscopic bruit—no symptom of stricture of the orifices. Many of these, especially medical men, had been put upon vegetable and most debilitating diet; nevertheless they received no benefit from that plan. They went up stairs with great difficulty, and all their symptoms went on increasing in severity. Not perceiving the proofs of organic disease, I changed the plan of treatment, prescribed substantial and plentiful diet, and soon found that the amelioration was progressive and decisive." The author details a remarkable case in illustration.

III. On the Dangers of Abstinence in Diseases of the Lungs.

In unequivocal inflammation of the lungs or their investing membranes, there can be no question about the necessity of rigid abstinence. But will this hold good, says he, "in those congestions of the lungs evidently the result of mechanical causes, of defect of venous action—in those states of black blood which take place consecutively to diseases of the heart—in old people, and in those who have been long enfeebled by chronic maladies?" I do not, says he, think it will. The principal indications, he observes, which present themselves are, to diminish promptly the quantum of blood circulating through the heart and lungs—and then to stimulate these organs into greater energy. It is not *irritation*, says he, which attracts the blood to the lungs in diseases of the heart. It is the mechanical obstruction to the circulation, and the gravity of the fluid itself, in conjunction with the weakness of the powers which move the blood. Take away, therefore, some blood, to give freedom to the circulation, and then give energy, if possible, to the organs which impel the vital fluid, by generous diet, in small quantities at a time, and watching the effects. This is bold doctrine, even in England, and in France it must be downright heresy. "Yet," says M. Piorry, "it is not without long experience and ample reflection that I have come to these conclusions." This theory rests upon solid and numerous facts. A great number of pulmonic inflammations, coupled with cardiac affections, in old people, were treated at the Salpetriére by bloodletting; but on the succeeding, and sometimes on the very same day, bouillons and light soups were given, occasionally wine. This plan succeeded better than the plan of rigid abstinence.

Regimen, says he, in phthisis pulmonalis, is of the utmost consequence. Broken down or softened tubercles will not heal on the starving system—nor will crude tubercles be absorbed by that system. Expectoration will not be rendered easier by depriving the patient of alimentary sustenance. On the contrary, the absorption of pus from ulcerations in the lungs will

be increased by abstinence, and hectic fever thus kept up—"in short, by starving a phthysical invalid, we add an additional evil to a frightful disease." Pathological anatomy teaches us that ulceration of the intestines is one of the most common causes of debility, and even of death, in phthisis. Vegetable food, which is more difficult of digestion than animal aliment, irritates these ulcerations, and increases the malady. "I am (says M. Piorry) very much deceived, if animal food should not be found necessary and beneficial in a great number of phthisical cases, that are now doomed to asses' milk and farinaceous aliment."

IV. On the Effects of Abstinence in Diseases of the Digestive Tube.

No practitioner would dream of giving animal, or any kind of full diet, in acute inflammatory affections of the stomach or bowels; but M. Piorry observes, there is some difficulty in ascertaining the time when we ought to discontinue the starvation system, when the disease assumes a chronic form. The appetite of the patient is some indication; though it is not always to be depended on. The effects resulting from the process of digestion, and also from the sanguification which ensues, are more safe criteria. Because the tongue is loaded, and the appetite nul, we are not thence to conclude that food is unnecessary. Often, in such a case, the attempt to masticate will recal some goût for victuals, and quickly clean the tongue. Pain in the stomach is not always a counter-indication against food. On the contrary, there are many cases and constitutions, where the epigastric pain is lessened by eating and increased by long fasting. Patients of this kind will throw off slops from their stomachs, and both relish and digest animal food.

The author has pushed his remarks to the diseases of the encephalon, and the effects of rigorous depletion and abstinence in such cases. But our limits are exceeded, and we must close the paper here.

[From the Medico-Chirurgical Review, April, 1833.]

On Tartar Emetic in Pneumonia, &c.

Case 1.—A female aged 29, was admitted into the Hôpital Necker with symptoms of pneumonia; in addition to the ordinary symptoms, the crepitating râle could be heard distinctly. She was bled, and put on low diet. Next day she had thirty leeches on the side; on the following day (28th March,) she was again bled; on the 29th, the dulness on percussion had increased; broncophony was extensively heard, and likewise bronchial respiration. Bleeding repeated. On the 30th, a blister ordered. On the 2d of April, the symptoms were bronchial respiration; louder crepitating râle; almost the whole right side, sounding dull when struck; pulse intermittent. Sinapisms to the legs.

3d. Tending to delirium; thoracic symptoms nearly as before. Infusion of polygala senega; a mixture containing four grains of emetic tartar ordered; and to be repeated in the evening with the addition of some syrup of poppies.

4th. The patient has been copiously purged; but not much vomiting; is better on the whole. Emetic mixture repeated.

5th. Has been only triflingly purged and vomited; the "tolerance" of the drug has been established; pulse again intermitting; the emetic mixture to be given twice with the syrup of poppies.

6th. Several alvine evacuations; pulse intermittent; the chest is becoming more sonorous at the upper right side; the respiration and subscrepitating returning râle is hard. Omit the antimonial mixture.

7th. Great prostration; eyes dull and sunk; pulse small and intermittent; nevertheless since the auscultatory state of the chest is more satisfactory, the antimonial to be resumed, and the quantity increased to eight grains, taken in two doses, at two hours' interval.

8th. Local symptoms of the peripneumonia still abating; only two stools.

9th. Better; no stool; pulse 75; chest has almost recovered its natural sonorousness. A mucous subcrepitating râle is heard.

From this time she gradually improved in health.

Case 2.—A female aged 25, was admitted on the 20th June, with all the symptoms of pneumonia, which had existed for several days. We need not enumerate the symptoms, and shall only allude to the auscultatory signs. The chest is dull behind on percussion; the respiration on the right side is bronchial; on the left, the crepitating râle is heard feeble, and as it were, at a distance. Venesection.

On the following day all the symptoms nearly the same; ordered a mixture containing eight grains of tartras antimonii, to be taken, by a spoonful every half hour.

22d. Has vomited four times, and been purged about twenty times; a favorable change already visible. Mixture with six grains.

23d. Not quite so well; has been neither vomited nor purged, so that the "tolerance" is now established. Mixture to be omitted, and simple pectoral medicines ordered.

24th. Much better; crepitating râle heard distinctly on the right side. She gradually recovered.

Case 7.—A carman aged 37, after being exposed to the cold and wet, was seized with pain in the chest, cough, dyspnœ, &c., these symptoms had continued for three days before he had entered the Hôpital Necker on the 2nd of January. When examined by percussion, the chest sounded dull behind; the respiratory murmur was not audible, but there was distinct bronchophony; no crepitating râle on the right side; whereas, on the left, the sound on percussion is clear, and the crepitating râle is well marked. V. Sectio. Mixture with eight grains of the tartras antimonii.

3d. One stool; has not vomited, is sensibly better, respiration is less bronchial and the air is heard to penetrate more freely into the right lung, as indicated by the presence now of the crepitating râle on this side. Continue the mixture as yesterday.

4th. Still better; the "tolerance" is now induced; no stool, nor vomiting. The dose of the antimonial to be increased to 12 grains.

5th. No evacuation upwards or downwards, crepitating râle more distinct on the right side, and the bronchial respiration is less. Dose to be increased to 15 grains.

6th. The left lung, which at first presented the crepitating râle, has now returned to its normal condition. Pulse has fallen to 60. Mixture, with 18 grains.

7th. Continues better; the crepitating râle heard over all the posterior and right part of the chest. Continue the mixture as yesterday.

He left the hospital quite well on the 28th.

Case 13.—A man Æt. 42, labored under pneumonia. He was ordered to be bled; but the surgeon failed in all his attempts to open the vein, so deformed and rickety was the patient. A mixture, containing six grains of the tartrate with an ounce of the syrupus papaveris, was prescribed. On the following day (15th Feb.), the patient was better; no vomiting, and only two stools. Mixture, with eight grains, and an ounce of the syrup.

16th. The auscultatory signs indicate that the pneumonia has advanced still more to resolution. Continue the mixture as yesterday.

17th. Is better; only a little mucous râle to be heard.

23d. Completely cured.

Remarks. M. Bricheteau, physician of the hôpital Necker, and the reporter of the preceding, among many other similar cases, states that, in his experiments on the effects of the tartrate of antimony, he has been anxious to determine the particular cases in which the contra-stimulating practice, as it has been called by the Italian physicians, may be advantageously substituted for the antiphlogistic treatment. In almost all the examples which he details, bleeding had been employed at first; and, in most, it was only when depletory measures seemed to promise little success, that recourse was had to the antimonial administration. He selected 14 cases for trial, and, before ever

exhibiting the powerful agent, most cautiously ascertained that there was no gastric or abdominal irritation to contra-indicate its use. He frankly admits that, when he commenced the practice, he was very sceptical of its good effects; but that now he regards it as a most potent, or, perhaps, the most energetic, of all curative remedies, in a vast number of pneumonic inflammations, especially in such constitutions as do not well bear evacuations of blood. The following is a brief abstract of its effects, in the 14 cases which are detailed in the author's paper.

In the 1st, the patient had been bled twice and had been blistered, without any decided benefit, before the antimony was used; and although most unfavorable symptoms existed, he ultimately recovered.

In the 2d, a bleeding appears to have done little service, and two doses of the medicine sufficed to arrest the disease.

In the 3d, two bleedings had been ineffectually practised, without any amelioration of the physical signs; and yet four doses of the antimonial caused them speedily to vanish.

In the 5th, we find that a relapse took place after an abatement of the symptoms, which had been favored by four bleedings. Two doses sufficed to restore the patient, and that, too, very quickly.

In the 6th, the good effects are also very obvious. In the 7th and 8th, the bleedings and antimonial were employed together on the first day of the treatment, as is the practice in Italy, the cradle of the contra-stimulating system. In one of these cases, the dose was raised to 18 grains daily.

In the 9th and 10th the results are also striking; in the latter, an exacerbation of the symptoms, which had been much mitigated, came on, yet promptly gave way to the antimonial, in the dose of 18 grains.

The 11th case was treated successfully with the antimonial alone; no bleeding was practised.

The 12th case is also a favorable instance. The 13th and 14th, patients died.

It will be seen that the medicine was never carried to the extent which has been recommended by the Italian physicians; and M. Bricheteau states that, whenever the resolution of the

disease appeared to make rapid strides, he omitted it immediately, leaving to Nature the completion of the cure; when the resolution was more gradual, the dose was gradually diminished. He never exceeded 18 grains at once; sometimes he added small quantities of opium to it, to check the nausea which distresses many patients, and to hasten the "tolerance" of the medicine. It was usually exhibited in an infusion of chamomile and orange leaves, and given by a spoonful at a time, at very short intervals.—*Révue Med. Sept.* 1832.

The preceding observations are well worthy the attention of every reader. We have given all the pith and substance of M. Bricheteau's memoir.—Ed.

March Of Epidemics.

Scarlatina has been prevalent in Great Britian for the last three months, and in Paris for the last six months, as may be seen by referring to our reports from the clinique of M. Bouillaud. On perusing a late number of a German periodical, we find that scarlet fever appeared sporadically in May, 1831, at Konigsberg, and epidemically in December of the same year; it continued till April or May of 1832, when it totally ceased. We shall extract a few particulars on some of the leading features of the disease, as observed in Germany. In some cases there was no eruption, although the other symptoms, such as cynanche, the scarlet-fever tongue, desquamation of the cuticle, and consecutive dropsy were present; moreover, they occurred generally in houses where the eruptive disease actually existed at the same time. In a family of three daughters, the middle-aged one was seized with cynanche maligna, accompanied with typhus fever; the eldest with mild angina tonsillaris, and the youngest, an infant 14 months old, with purging and feverishness. No sooner had they recovered from these ailments, than the youngest had dropsy, the middle one had otorrhœa, and the eldest violent convulsions. Now in none of these cases was there any appearance of exanthema or of des-

quamation ; whereas, in another set of patients, the latter symptom, and also anasarca, followed attacks of "cynanche sine eruptione." The size of the scales thrown off during convalescence, was remarked to be generally in proportion to the darkness of the hue of the preceding eruption ; where this has been purplish-red, the scales were large—where it had been pale and indistinct, they were small and furfuraceous. Swelling of the parotid glands, during the eruptive stage, was found to be an unfavorable symptom, as cerebral symptoms often attended it, and deep-seated ulceration followed in many cases.

The fever was generally the ordinary synochus ; but sometimes a most violent form of synocha, with a great tendency to inflammatory congestion of the head. The treatment of this latter fever required the utmost skill and exertion, because the transition from active phlogosis to typhoid depression was frequently very sudden and rapid, so that, while leeches and cold applications to the head were in use, it was necessary to exhibit stimulants inwardly.—*Medicinishe Zeitung.*

On the Employment of Issues, and of other Drains, in the Prevention and Treatment of Diseases.

The author, M. Chauffard, of Avignon, strongly insists upon the good effects of these means in a variety of morbid affections. Several cases are adduced of their prophylactic and curative efficacy, in strumous and cachectic children ; thus obstinate coughs, headachs, convulsions, hæmoptysis, dyspnœa, have yielded to their use, when every other remedy had failed. We need not say that strict attention must be paid to regimen and dietetics at the same time, although we deem these latter means to be often unavailing by themselves. Fabricius Hildanus and Ambrose Paré state, that they had more confidence in issues and setons on the nape of the neck, for the cure of obstinate epilepsy, than in any other measures. "Quo solo, innumeros cerebi mortiferis morbis correptos, ad sanitatem, ul-

ceribus diu fluidis permanentibus, perduxi." Cases not unfrequently occur, where all the symptoms of confirmed, or at least of threatened, phthisis disappear, upon the supervention of a large anal abscess: for example—a soldier, in the second stage of the disease, had cough and purulent expectoration, hectic fever, night sweats, and was greatly wasted in flesh. A large abscess formed in the perineum, broke and discharged copiously; in time it healed, and two issues were established on the inside of the thighs. The patient quite recovered. [How vexing it is that medical men will not use their ears, and affix to the reports of their cases the auscultatory signs; without these, we are not warranted in drawing any safe conclusions.—Ed.]

"My own experience (says Baumes) induces me to think, that the early stage of consumption is best counteracted by issues, sufficiently multiplied and renewed. Euryphon covered, in some degree, the bodies of his patients with them, and did not expect much benefit unless the discharges were copious, and from different parts. Louis, a high authority in this disease, reports favorably of the same means, and states, that if we have the courage to employ in time a sufficient number of these derivative channels for the acrimonious humors, very marked advantages may be expected from the practice. Dr. Mudge considered that he cured himself of phthisis by establishing a large issue on his back; it held fifty peas. The practice has the authority of Celsus:—"Exulcerandum est ferro condenti, uno loco sub mento, altero in gutture, duobus ad mammam utramque, item sub imis ossibus scapularum."

The chronic inflammation of the larynx, accompanied with an ulcerated state of the mucous lining, is another species of phthisis, which is as generally fatal as the true pulmonary consumption, and which, in many cases, is equally benefited by the establishment of permanent purulent drains. The author alludes to one case, which was cured by repeated moxas on the sides of the neck, by absolute quietude and silence, and by a sojourn in the neighborhood of Naples.

We shall give the particulars of another case, not only because the subject is one of importance, but also as it affords an occasion to introduce to our readers a specimen of a prescription from a French physician.

A gentleman aged 38, was affected with a chronic irritation of the larynx; the voice was hoarse and feeble; the expectoration was copious, purulent, and streaked with blood; it was brought on by paroxysms of a cough, which was not deeply seated; the palate and mouth were inflamed, covered with livid vesicles and œdematous; hectic had wasted the patient's strength. He was ordered warm clothing, light farinaceous and milk diet, and absolute silence for a year or more; small doses of the syrup of morphine were taken twice a day; he was occasionally bled to a small amount, or leeched; a laudanum poultice was put round the neck; and an issue, to hold four peas, inserted on the nape. The lunar caustic was applied to the rectum and inside of the mouth. By a riged observance of the above treatment for four months, the patient's health was much improved; the issue was kept freely open for more than five months, and the discharge was so copious, as to require fresh dressing twice daily. M. Recamier was consulted at this time, and the following is an abridged copy of his "response."

"The facts which are to be attended to, in considering this patient's case, are the supervention of hæmoptysis, occasioned by long-continued exercise of the voice; the existence of a chronic irritation of the larynx, with hoarseness; and lastly, an unhealthy place of abode, and an occupation unfavorable to recovery. I therefore prescribe a mild diet of butcher and poultry meat, farinaceous vegetables, ripe fruits;—water, as the only beverage; and asses' milk every morning and evening. An alum gargle is to be used for the throat, a small blister is to be applied on the front of the neck; and the patient must keep absolute silence for at least twelve months after the cure; he should avoid all drafts of air, and when he takes exercise, it must be gentle and easy;—much heat also is hurtful; and hence large fires, stoves, &c., are not to be approached."—*Trans. Med. Aug.* 1832.

[From the Medico-Chirurgical Review, July, 1830.]

Essays on Hypocondrical and other Nervous Affections.

BY JOHN READ, M. D.

So close is the connexion of the mind and the body, and such is their mutual influence in action or suffering, that in no possible case of human life, can the one be affected without producing some impression on the feelings of the other. Yet this truth, which has never been denied even by the sternest stoic, or the most subtle metaphysician, has attained universal assent, rather as an article of sensation than of science; as being the compulsion of experience more than the result of inquiry. Some men may call in question the liberty of the human will; and others may weave a fine spun chain of arguments against the existence of matter and the reality of an external world; but after all, whether our thoughts are strung together by necessity, and our movements are impelled by causes over which we have no control; whether the forms that occasion pleasure or pain are substantial or ideal, still the conclusion is the same, as it relates to the sympathy by which the mental and corporeal faculties mutually operate to the ease or disquiet of the entire system. It is, therefore, mortifying to the pride of man's wisdom, that in an age which, above all others, has pushed with the greatest effect the energy of philosophical investigation into the hidden mysteries of Nature, which has traced the minutest essences through a variety of modifications to their elemental principles, with an assiduity that claims applause, and a success that commands admiration; still, after all, and to abate the swell of vanity arising from this consciousness of intellectual superiority, man is made to confess that he knows more of the world around him, than of that which he carries within his own compact form. They who, more than others, are obliged to study the constitution of the human frame, and to extend their inquiries into a vast variety of scientific objects, that they may be qualified to render that study complete and beneficial, even the

professors of the noblest art that can engage the time and the talents of man, are in like manner compelled to acknowledge their total inefficiency to account for the aberrations that so frequently disturb the machine with which they are most acquainted. This *crux medicorum* is the more distressing, because while it urges application, it confounds the judgment; and at the same time that it calls for the discovery of a remedy, it baffles hope, in being under the necessity of leaving that to chance which can never be determined by any certain principle of operation, or be regulated by any rule of practice. Without presuming to advance that the awful malady of Insanity, in all its shades of gradation, can never become so precisely defined as to admit of medical management with a probability of success; we must at least be allowed to say, that hitherto our acquaintance with mental diseases has gone little further than to an observation of general causes and effects, over which professional skill may exert its best efforts in vain. With this impression on our minds, we took up the present volume, in the expectation of seeing much ingenuity wasted in an attempt to remove that opprobrium of medical science, which the subject of insanity has so long proved. We were prepared, indeed, from what we had with pleasure read in the periodical reports of the author, to meet with some acute and lively remarks on extraordinary cases, as also with sagacious counsel in regard to the means employed for the relief of persons affected by nervous disorders. But we had no thought that in a book bearing an unassuming title, and upon an unpromising topic, would be found so many new lights, in the simple form of hints, on the various excitements to mental disease, and upon the injudicious manner in which they are too commonly treated. That the author has been prevented from fulfilling his original intention of publishing a systematical treatise on the subject, is rather a matter of congratulation than otherwise; as, by throwing out his observations in the form of Essays, he has rendered his work more likely to become popular and beneficial, by bringing it immediately to the view of those who would be alarmed at the thoughts of perusing any thing like a theoretical or argumentative performance.

The essays are twenty-seven in number; and although they have not the formality of a connected arrangement, yet, as if the maxim of Horace had been under contemplation, the reader will find in his progress, that the order could not have been better disposed, even to constitute a train of leading principles.

The first Essay is "On the Influence of the Mind on the Body," in which consciousness, as the peculiar faculty of man, is set forth in strong and elegant language. The following remark, at the close, strikes us as equally new and important.

"The class of persons whose lives are devoted to mere manual labor, especially the more indigent part of them, are, to a certain extent, distinguished by the character of their diseases, as well as that of their other evils. They differ from the higher orders, less perhaps in the actual quantity, than in the glaring and obstrusive color of their calamities.

"There is no person, perhaps, who is apt to form so low an estimate of the value of human existence, as a medical man practising amongst the poor, especially amongst the poor of a great city. But it is not impossible that he may exaggerate the excess of their sufferings, by combining, as it is natural for him to do, their external state with those feelings which he has acquired from very different circumstances and education. As the horrors of the grave affect only the living, so the miseries of poverty exist principally, perhaps, in the imagination of the affluent. The labor of the poor man relieves him at least from the burden of fashionable ennui, and the constant pressure of physical inconveniences, from the more elegant, but surely not less intolerable distresses of a refined and romantic sensibility. Even those superior intellectual advantages of education, to which the more opulent are almost exclusively admitted, may, in some cases, open only new avenues to sorrow. The mind in proportion as it is expanded, exposes a larger surface to impression."

Essay II. On "The power of Volition," exhibits some curious cases wherein several persons have been known to "possess power not only over the feelings and faculties of the mind, but likewise over what are called the involuntary muscles and even

the blood-vessels of the body." But, amusing as this part of the Essay is, what the author has observed on the inhumanity of treating hypochondriacs with ridicule, is better adapted to improve the feelings and to regulate the practice of men.

"No one was ever laughed or scolded out of hypochondriasis. It is scarcely likely that we should elevate a person's spirits by insulting his understanding. The malady of the nerves is in general of too obstinate a nature to yield to a sarcasm or a sneer. It would scarcely be more preposterous to think of dissipating a dropsy of the chest, than a distemper of the mind by the force of ridicule or rebuke. The hypochondriac may feel indeed the edge of satire as keenly as he would that of the sword; but although its point should penetrate his bosom, it would not be likely to let out from it, any portion of that noxious matter by which it is so painfully oppressed. The external expression of his disorder may be checked by the coercive influence of shame or fear; but in doing this, a similar kind of risque is incurred as arises from the repelling of a cutaneous eruption, which, although it conceal the outward appearance, seldom fails still more firmly to establish the internal strength, to increase the danger, and to protract the continuance of the disease. By indirect and imperceptible means the attention may, in many instances, be gently and insensibly enticed, but seldom can we with safety attempt to *force* it from any habitual topic of painful contemplation. In endeavoring to tear the mind from a subject to which it has long and closely attached itself, we are almost sure to occasion an irreparable laceration of its structure.'

In the third Essay, "On the Fear of Death," the reader will meet with much excellent reasoning, to dispel apprehensions which are, in themselves more tormenting than the object of dread. The author deprecates all tendency to encourage despondency; and among the rest, he shows the fatal effects of predictions of death.

"In dangerous maladies, the person in whom there is the least fear of dying, has, other circumstances being the same, the fairest chance to survive. Men, in critical situations, are apt to be overwhelmed by their terrors; they are drowned by their too eager struggles to emerge; they would keep afloat, if they remained quiescent."

The effects of PRIDE on the mind in producing mental derangement, constitute the subject of the fourth Essay; in which we were much pleased with this judicious discrimination in the mode of treating different persons.

"The humbly nervous ought to be treated with the most encouraging respect, and with the most courtier-like attention. We should endeavor, by expressions of an extraordinary regard for them, to supply the want of satisfaction which they are apt to feel with themselves. On the other hand, a haughty imbecility ought to be met by a management that is calculated to depress the patient in his own eyes, and to sober a spirit that may have been intoxicated by draughts of a servile or treacherous adulation."

The next Essay is on "Remorse," which, beyond doubt, is one of the most dreadful of all diseases when it has become fixed in the mind, and the most difficult to cure. But it should be considered, and the author has prudently laid great stress upon the fact, that remorse is not always occasioned by actual misconduct. It is in truth, perhaps, no less frequently the suffering of a tender and upright mind, than of a guilty conscience. Of this we have in addition to some well known cases, the following; which came under the observation of the author himself.

"It is not very long since I had a professional opportunity of knowing something of the morbid history of a man, who had succeeded to a peerage, and an immense estate, by the death of an elder brother, with whom he had not been upon good terms for some years previous to that event. The unfortunate heir to the title and domains so severely reproached himself for that suspension of fraternal amity, with regard to which he was altogether innocent, that he sunk into a profound melancholy, from which I have reason to believe nothing has hitherto been able to rouse him.

"I knew another person, who, although his life had been signalized by the most active and successful exertions in behalf of his fellow creatures, was affected with a despondency, the burden of which was, that he had been all along a useless member of society, and that the talents which had been given him had

produced nothing in his hands. Under the influence of this imagination, he expressed a kind of horror as well as shame, at the prospect of giving up a stewardship, the duties of which he had, as he thought, so unfaithfully discharged.

"Not many months ago, I had an opportunity of knowing an instance of the melancholy effect of remorse, where the feeling, although not altogether without foundation, was unduly aggravated by an accidental association of occurrences.

"A young lady was one morning requested by her mother to stay at home; notwithstanding which, she was tempted to go out. Upon her return to her domestic roof, she found that the parent, whom she had so recently disobliged, had expired in her absence.—The awful spectacle of her mother's corpse, connected with the filial disobedience which had almost immediately preceded, shook her reason from its seat, and she has ever since continued in a state of mental derangement."

It is well observed, at the commencement of the sixth Essay, that "an hypochondriac should be a hermit in abstinence, but not in solitude." This subject of seclusion from the pleasures of society is ably treated, and the danger of retirement to those who have been accustomed to business is clearly shewn and supported by proofs. Yet a due caution is introduced with regard to the choice of society; for, as it is properly observed,

"We are not perhaps sufficiently aware that nervous complaints are, through the medium of sympathy scarcely less infectious than ferbrile diseases. Amongst many other instances illustrative of this opinion, I particularly recollect the case of an amiable young woman, who, although she had been before remarkable for the uniform cheerfulness and gaiety of her temper, became decidedly, and often deplorably dejected, in consequence of having for a length of time, been domesticated with an elderly friend who was of a desponding and melancholy cast. The contiguous atmosphere of an hypochondriacal, like that of a typhus patient, may, in a certain sense, be said to be impregnated with contagion."

The seventh essay is "On excessive Study or Application of the Mind," which, though short, contains some excellent advice to literary gluttons.—This Essay is followed by another equally

brief, "On Vicissitude as a Cause and Characteristic Symptom of Intellectual Malady." Of the effect of transitions upon the mind, the following instance is given.

"I recollect the case of an unfortunate young man, who became a victim to the disastrous issue of a variety of mercantile adventures. The same blow which deranged his affairs, produced a disorder of his reason. His finances and his faculties fell together. The phantoms of imagination indeed survived, and seemed to hover over the ashes of his understanding. The demon of speculation, which had before misled his mind, now possessed it entirely. His projecting spirit, which was always more than moderately intrepid, took, in the maniacal exaltation of his fancy, a still bolder and sublimer flight. Some of his schemes reminded me of another madman that I had heard of, who planned, after draining the Mediterranean, to plant it with apple trees, and establish a cider manufactory on the coast."

The ninth Essay is "On the want of Sleep," as symptomatic and a cause of mental derangement; in which the author recommends the cold or the warm bath where dietetic opiates have failed.

The next Essay on "Intemperance," contains many valuable cautions with respect to the use and abuse of stimuli; well adapted to make a deep and salutary impression upon the minds of readers in general; but the following is not less deserving the attention of the faculty.

"Inebriety is not properly confined to the use of fermented liquors. The tipplers of laudanum are sots, although of another sort. There is something peculiarly plausible and seducing in this mode of fascinating the sensations. Opium does not in general, as wine is apt to do, raise a tumult of the feelings, or involve the intellect in clouds; but acts more like oil poured upon a tumultuous sea, which tends to allay the agitation of the billows, and induces an agreeable stillness and tranquillity. Instead of lowering man to a level with the beasts, it often invests him, for a time, with the consciousness and at least fancied attributes of a superior being; but he is soon stripped of his shadowy and evanescent prerogative, and is made to suffer all the horrors and humiliation of a fallen angel.

The confessions of many a miserable hypochondriac, who has been in the habit of having recourse to opium for relief, justify this representation from the charge of caricature. Grievous as is the depression which takes place, as the second effect of fermented liquors, that which succeeds to the excitement produced by laudanum, is still more intolerable. It is of course a task less difficult to refrain from the former than the latter, when the latter has been for many years regularly applied to for temporary comfort or support, in a desertion or prostration of the spirits. The late Dr. Heberden was of opinion, that it is more easy to relinquish opium than wine, and therefore, in cases which may seem to require either the one or the other, he recommends the former in preference to the latter. My own comparatively contracted experience would incline me, in the same circumstances, to give different advice.

"I have known only one case, in which an inveterate opium-taker has had resolution enough to dispel the charm which had long bound him to its use. This patient was in the custom of employing it in that concentrated form of the drug, which has received the appellation of the black drop. The dreadful sensations which he experienced for a considerable period, after having refrained from his wonted cordial, he was unable to express, any more than the gratitude which he felt towards his physician, for having strenuously and repeatedly, and at length successfully urged him to an abstinence from so delusive and bewitching a poison. When opium is employed as a remedy in cases of merely physical disease, it may not be liable to the same objection; although, even in that class of maladies, it ought to be in general reserved for occasions of urgency or peril. When used for a length of time without any considerable intervals, its bad effects upon the constitution will be found to accumulate, whilst its alleviating influence over troublesome and painful symptoms, becomes almost every day less observable."

From the danger of Intemperance, the author proceeds very appropriately to consider the injury occasioned by "the Excess of Abstinence;" for, as he observes, "we may be intemperately abstemious, as well as intemperately luxurious and indulgent. That degree of privation which is unnatural or unreasonable, proves no less destructive than superfluous and superabundant gratification."

This Essay is followed by one on "Morbid Affections of the Organs of Sense;" in which considerable attention is paid to the organ of vision; illustrated by some remarkable cases in the author's own practice. One of these we shall extract.

"During my attendance upon the Finsbury Dispensary, a remarkable instance of dimness of sight occurred, that had for some time previously been gradually approaching towards blindness, which, indeed, had actually taken place in one of the eyes. The patient first perceived the dimness the day after she had been frightened by witnessing a violent paroxysm of epilepsy, with which her husband had been attacked the preceding night. Since that time she had herself become, although not in the least so before, extremely liable to fits, and was apt to fall down insensible upon occasions of the slightest degree of agitation or surprise. Her dimness of sight seemed to consist, not in an injured state of the eye, but in a debility of the nervous system in general, that *appeared* more particularly in that delicate and exquisitely irritable part of it which is destined for the purposes of vision. The capacity of seeing with the eye that was not altogether blind, was intermittent, 'going and coming,' to use her own comparison, 'like the sun when a cloud passes over it.' The patient had likewise been subject to a deafness, that might be traced to the same circumstance as gave rise to her opthalmic malady. Both symptoms had, in all probability, a common origin in nervous weakness or derangement."

In the thirteenth Essay, the opinion, or rather vulgar error, is successfully combated, "that madness, in any of its modifications, arises for the most part from an excess of intellectual vigor."

"That Physical malady may be the occasion of mental disorder," is proved in the next Essay by facts and arguments, while at the same time, the author very properly guards against any leaning towards the doctrine of materialism, which that position might be supposed to favor. We quote from this Essay, with great pleasure, the following reflections on the duty of moderation in scientific pursuits.

"Speculations with regard to the nature of the vital or intelligent principle in man, are involved in so much obscurity, as to

allow greater scope for the display of a fertile imagination, than for the sober exercise of the reasoning faculty. The clouds in which this subject is enveloped, the rays of genius may illuminate, but cannot disperse. The unwarrantable boldness and decision with which many are apt to speak upon a question, which, from an incurable deficiency of data, admits of no satisfactory conclusion, argues a more than ordinary imbecility, rather than any superiority of understanding. Genuine intrepidity of every species, is naturally allied to modesty. There is a chaste and sober scepticism. When we profess that there is no moral evidence so immaculately clear, as to preclude all obscuration of doubt, we acknowledge merely the present imperfection and immaturity of our nature. A peremptory positiveness of opinion, as well as a rashness of action, is natural to the ardour and inexperience of youth; but diffidence gradually grows upon declining life. Unlimited dogmatism, in almost every case, affords suspicion of very limited information. In the degree in which our actual knowledge advances, we increase likewise our acquaintance with its comparative deficiency. As the circle of intellectual light expands, it widens proportionably the circumference of apparent darkness."

The fifteenth Essay contains some good remarks on the polluted atmosphere of the metropolis, from which the author slides gradually into a brief notice of the very old, but not therefore true opinion, "that the gloomy month of November is peculiarly disposing to melancholy, and the favorite season of suicide." This proverbial reproach upon our climate, at that part of the year, is thus dismissed.

"The dark hues of the mind are not in general reflected from the sky; and the preternaturally exalted excitement of mania, soars in general above atmospheric influence. There are cases, indeed, in which the diseased apprehensions of an hypochondriac are relieved or aggravated by the changes of the weather; where, when the sun shines, even his mind seems to be irradiated by its influence, and scarcely a cloud can obscure the face of nature, without at the same time casting a melancholy shade over his speculations."

The Sixteenth Essay on "Dyspeptic and Hepatic Diseases," comprehends many valuable rules for regimen, and several hints equally worthy of professional observation and private attention. We were particularly pleased with the following remark, because it exactly conveys our own sentiments, and shews that the zeal of improvement may sometimes, even in the best concerns, be carried beyond the bounds of discretion, and that regulations and institutions, which we may think evil or unnecessary, may be both salutary and advisable.

"The observance of fasts is a wholesome form of superstition. The omission of them in the Protestant calendar, was, perhaps, as it relates to health, an unfortunate result of the reformation. Though no longer regarded by us as religious institutions, it would be desirable that some of them at least should be still kept with a kind of sacred punctuality, as salutary intervals of abstinence, which give to the stomach a periodical holiday, and afford an occasional respite from the daily drudgery of digestion."

This Essay is properly followed by one on "Palsy, Idiocy, Spasmodic and Convulsive Affection;" the perusal of which will yield both instruction and entertainment. Among the cases here neatly reported and yet accurately described, we are particularly struck with one which we shall give in the author's words:

"About two years ago, I met with a remarkable case, which strikingly exemplified the connexion and affinity that may exist between what are called 'bilious affections,' and those which belong more apparently and decidedly to the nervous system. The patient referred to, had, in consequence of a severe domestic privation, been seduced into habits of intemperance, which, for two years, seemed to have no effect but upon the liver, producing at nearly regular intervals of ten days, vomitings of bile, occasionally accompanied by a diarrhœa, which, when combined with the former, of course assimilated the disease to the character of cholera. For the considerable period above-mentioned, his only apparent complaint was what, in popular and fashionable language, is called the 'bile'. After the lapse, however, of somewhat more than two years from the

commencement, of his intemperate habits, without having received any precautionary or prefatory intimation, he was surprised by a seizure which paralyzed one half of his body, dividing it longitudinally into two equal sections, the one dead to all the purposes of sensation or voluntary motion, the other retaining the functions and privileges of vitality, although in some measure, of course, clogged and impeded by the impotent and diseased half to which it was united. When I saw him last, he had remained three years in this truly melancholy state. At least, during that time, he had experienced no important or permanent amelioration, nor any evident tendency towards the recovery of his corporeal powers. His mind also seemed to have shared in the paralysis. This was more particularly obvious in the lapses of his recollection. His memory had been maimed by the same blow which had disabled one side of his body. His recollection with regard to things, did not seem to be much impaired, but it was surprisingly so with regard to the denominations of persons or places. He has often forgotten the name of an intimate friend, at the very time that, with the most unaffected cordiality, he was shaking hands with him. Upon inquiry, it appeared that the pernicious habits of the patient were still persisted in; a circumstance which alone was sufficient to account for the uninterrupted continuance of this disorder.

"In this case nothing could be more evident than that the bilious symptoms with which he was first affected, and the nervous complaints which succeeded, both originated from one source: and this may give a hint to those who are much troubled with the *bile*, as it is called, especially when it has been occasioned by the same means as in the instance just stated, that unless they seasonably reform their regimen, they may be at no great distance from a paralytic seizure."

Dr. Reid speaks slightly of the Bath waters as a remedy in paralytic cases, nor is he much more favorable to electricity; and, as he very properly observes,

"In the treatment of disease, it must appear desirable to effect the cure, when it is practicable, by means which act generally and impartially upon the body, rather than by those which

operate, although not slowly, yet more immediately and with peculiar force, upon the delicate nerves and fibres of the stomach. The health, and of course comfort of man, depend in a principal degree, upon the due vigor of his powers of digestion, which by the inordinate or unnecessary use of drugs, has, in too many instances, been gradually impaired, and at length irrecoverably destroyed. This is apt to be the case, more especially with those fashionable hypochondriacs who are continually having recourse to the doses of pharmacy, in order to relieve the *ennui* of indolence, or to support the languor of an effeminate or enervated constitution. Such an existence as theirs may, out of courtesy, be called life, but it possesses none of life's privileges or its blessings."

An ingenious but rather brief Essay on "Hereditary Madness," is the next in succession; and we should have been glad to have seen so excellent a disquisition upon a subject of great importance to society more extended; and our readers, no doubt, will be of the same opinion, after perusing the following remarks on the duty of celibacy in those who are radically of a morbid intellect.

"Nothing can be more obvious, than that one who is aware of a decided bias in his own person towards mental derangement, ought to shun the chance of extending and of perpetuating, without any assignable limit, the ravages of so dreadful a calamity. No rites, however holy, can, under such circumstances, consecrate the conjugal union. In a case like this, marriage itself is a transgression of morality. A man who is so situated, in incurring the risk of becoming a parent, involves himself in a crime, which may not improbably project its lengthened shadow, a shadow too which widens, in proportion as it advances, over the intellect, and the happiness of an indefinite succession of beings.

The 19th Essay, on "Old Age," contains some good moral observations on the desire of longevity; but, disposed as we are to admire the penetration and judgment of the author, even in metaphysics, we cannot assent to his assertion, that "an old man is no longer susceptible of new ideas;" and that "his mind lives altogether upon the past." So far, indeed, as this

may be said of the general character of climacterics with respect to the study of new arts and languages, we are of the same opinion: but many instances might be adduced of men who have been too much devoted to pleasure or business, to study in the prime of their years, but who have, in the decline of life, attained a competent degree of knowledge, and acquired a relish for inquiry which has been productive of the best consequences.

The Essay on "Lunatic Asylums" cannot fail to be read with avidity at a time like this, when these receptacles have, in an uncommon degree, excited the public attention and parliamentary investigation. This part of the work was written long before the subject had become a matter of general observation, and yet evils which have been developed by authority did not escape his examination, as appears from the following extract:—

"A heavy responsibility presses upon those who preside or officiate in the asylums of lunacy. Little is it known how much injustice is committed, and how much useless and wantonly inflicted misery is endured in those infirmaries for disordered, or rather cemeteries for diseased intellect. Instead of trampling upon, we ought to cherish, and by the most delicate and anxious care, strive to nurse into a clearer and brighter flame the still glimmering embers of a nearly extinguished mind.

"It is by no means the object of these remarks to depreciate the value of institutions which under a judicious and merciful superintendance, might be made essentially conducive to the protection of lunatics themselves, as well as to that of others, who would else be continually exposed to their violence and caprice. But it is to be feared, that many have been condemned to a state of insulation from all rational sympathising intercourse, before the necessity has occurred for so severe a lot. Diseased members have been amputated from the trunk of society, before they have become so incurable or unsound as absolutely to require separation. Many of the depôts for the captivity of intellectual invalids may be regarded only as nurseries for and manufactories of madness; magazines or reservoirs of lunacy, from which is issued from time to time, a sufficient supply for perpetuating and extending this formidable disease—a

disease which is not to be remedied by stripes or strait-waistcoats, by imprisonment or impoverishment, but by an unwearied tenderness, and by an unceasing and anxious superintendance.

"The grand council of the country ought to be aroused to a critical and inquisitorial scrutiny into the arcana of our medical prisons, into our *slaughter-houses* for the destruction and mutilation of the human mind."

The 21st Essay is "On the importance of counteracting the tendency to Mental Disease;" in which are these remarks upon one of the most important considerations arising out of the subject of insanity, as affecting the medical character in the reliance placed upon its testimony:

"Lucid intervals are a subject deserving of the very particular study of the legal, as well as the medical profession. There are, in fact, few cases of mania, or melancholy, where the light of reason does not now and then shine between the clouds. In fevers of the mind, as well as those of the body, there occur frequent intermissions. But the mere interruption of a disorder is not to be mistaken for its cure, or its ultimate conclusion. Little stress ought to be laid upon those occasional and uncertain disentanglements of intellect, in which the patient is for a time only extricated from the labyrinth of his morbid hallucinations. Madmen may shew, at starts, more sense than ordinary men. There is perhaps as much genius confined, as at large; and he who should court corruscations of talent, might be as likely to meet with them in a receptacle for lunatics, as in almost any other theatre of intellectual exhibition. But the flashes of wit betray too often the ruins of wisdom, and the mind which is conspicuous for the brilliancy, will frequently be found deficient in the steadiness of its lustre."

In the 22d Essay, the author treats of the use and abuse of "Bleeding;" which is admitted to be absolutely necessary in true pleurisy, but censured in strong terms, when indiscriminately resorted to in all cases of palsy and apoplexy.

On the subject of "Pharmacy," which is treated in the next Essay, the author very properly deprecates the practice of prolonging a medicinal course in cases of convalescence from acute disease; and the following observations, by the way of analogy,

are equally deserving of the serious consideration of valetudinarians and practitioners.

"In the prescriptions of physicians, as well as in the preparations of cookery, a simplicity ought to be observed, which is in general, perhaps, not sufficiently attended to. A number of different dishes, which, separately taken, might be wholesome and nutritious, must altogether form a compound that cannot fail to have an unfavorable and disturbing effect upon the organs of digestion. In like manner, a glass of Port wine or a glass of Madeira, a draught of ale, or one of porter, might, in a state of debility or fatigue, for a time at least, invigorate and refresh; while if we take a draught, the same in quantity, but composed of all these different liquors, we shall find that, instead of enlivening and refreshing, it will nauseate and oppress. And yet something similar to this daily takes place in the formulæ of medical practitioners. A variety of drugs are often combined in the same recipe, each of which might be good, but the whole of which cannot. A mixture of corroborants or tonics, is not necessarily a tonic or corroborative mixture. A prescription ought seldom, perhaps, to contain more than one active and efficient ingredient; we should thus give that ingredient fair play, and by a competent repetition of trials might be able to ascertain, with tolerable correctness, its kind and degree of influence upon the constitution: whereas, out of a confused and heterogeneous mass, it is impossible for us to discriminate the individual operation of any one of the articles which compose it."

In the 24th Essay, "Ablution" is considered in a similar manner with a decisive approbation of the use of cold water, as the means of preserving health, and of restoring it in particular diseases. But at the same time, the idea of superior advantages to be derived from sea-bathing is ridiculed with effect.

"Bodily exercise" is strongly recommended in the 25th Essay; in which, among many other acute remarks, we were particularly struck with the following:

"Improvements in the mechanism of modern carriages, by which they are made to convey a person from place to place,

almost without giving him a sense of motion, may be one of the circumstances that have contributed to the increased prevalence of those maladies which originate in a great degree from a fashionable indulgence in lassitude and languor."

The next Essay has for its title, "Real Evils, a Remedy for those of the Imagination;" and, with the relation of some curious cases, it exhibits observations which may be considered as judicious hints for practice.

The last Essay in the volume is on the advantages arising from "Occupation;" the necessity of which is enforced by solid reasoning apt illustration, and a singular case, with which we shall conclude our extracts, already sufficiently numerous.

"I was once consulted by a hypochondriacal patient, who had been the greatest part of his life a journeyman taylor, but who, by an unexpected accident, became unhappily rich, and consequently no longer dependent for his bread upon drudgery and confinement. He accordingly descended from his board; but Charles the Fifth, after having voluntarily descended from his throne, could not have regretted more severely the injudicious renunciation of his empire. This man, after having thrown himself out of employment, fell ill of the tedium of indolence. He discovered, that having nothing to do, was more uncongenial to his constitution, even than the constrained attitude, and the close and heated atmosphere in which he had been accustomed to carry on his daily operations. In one respect, however, the repentant mechanic was less unfortunate than the imperial penitent. It remained in the power of the former to reinstate himself in his former situation; which, after having resumed it, no motive could, a second time, induce him to relinquish."

After so copious a view and minute an analysis of the present volume, any thing farther that we could say concerning it must be needless; the reader will see by the subjects treated, that the work is one of universal interest, because there is no human being, capable of thinking, who has not his seasons of mental depression or excessive irritation, who is not either called upon to watch over his own infirmities, or to commiser-

ate those of others. In the extensive range of moral and actual ills, there is not one that is so frequently obtruded upon our feelings as nervous sensibility; and, therefore, a more benevolent office can hardly be undertaken, than that of pointing out the varieties of this Proteian malady, and the causes which tend to its ascendancy over the body and mind, till the grave closes upon the one, or reason is extinguished in the other.

Treatment of Hooping-Cough.

BY PROFESSOR AUTENRIETH.

No internal medicine is given, except for contingent symptoms, and the only remedy used is friction with tartar-emetic (ʒiss add ℥j. axumgiæ.) A portion, of the size of a nut, is to be rubbed on the epigastric region three times a day. On the second or third day, an eruption of vesicles and bullæ appears; the friction is to be continued: the eruption spreads, and becomes pustular like that of small-pox; the friction may now be applied to any other part, but the eruption on the epigastrium is not to be permitted to pass too quickly off. In order to insure the efficacy of the treatment, we must not be satisfied merely with producing pustules; the rubbing ought to be continued till small ulcerations in the intervals between the crusts appear. The above treatment is to be steadily pursued for eight or twelve days; if the eruption prove very painful, no application is so good as a hemlock fomentation.

Autenrieth has found this method most successful in two severe epidemics, during which he did not lose one patient. He does not approve of the watery solution of the tartarized antimony, and of the tincture of cantharides, recommended by Struve.—Henke, an eminent German physician, has seen numerous cases of pertussis much benefited by a combination of bark and opium; he has also employed, with advantage, various stimulant antispasmodics, as ætherial preparations, ammonia, &c. but very judiciously urges the practitioner to draw the

distinction between inflammatory and spasmodic hooping-cough as it must be quite unnecessary to say, that a plan of treatment applicable to the one form may be most pernicious in the other.—*Bullettin de Therapeutique, Nov.* 1833.

Foreign Body in the Trachea for Five Months.

A CHILD, 5 years old, in frolic swallowed a French bean; immediately all the signs of suffocation came on, and, after continuing for two hours, they ceased, and the little patient was cheerful, and apparently well: but again the same distress in breathing and the shrill croaking voice returned, and again they vanished—these attacks every now and then came on. After the lapse of 5 months, the child was seized with a violent paroxysm of cough and excessive dyspnœa, which had been brought on by leaping, and in the course of a short time the child died suffocated.

On dissection, two pounds of serum were found in the left pleura, and there were numerous adhesions between the lungs and ribs upon this side; the left lung was much congested, and did not crepitate—its color was a deep purple. Where the bronchus enters the lung, an inflammatory ring of six lines in diameter was observed; here, no doubt, the bean had lodged during the five months, till it had been displaced by the shaking of the body from the leap, into the right bronchus, where it was found hermetically plugging up the tube.—*Révue Med.*

[From the Medico-Chirurgical Review, April, 1833.]

Aphonia.

BY DR. WEBSTER.

SOME curious cases of this affection are related by Dr. Webster in our esteemed cotemporary, the Medical and Physical Journal, for September last. They occurred in the practice of Dr. Webster in the St. Georges' and St. James' Dispensary.

In these individuals, there was principally observed a peculiar affection, amounting almost to a total loss of voice, without any decided proof of disease in the larynx or glottis. From these and other cases, which Dr. Webster has observed, he comes to the conclusion, that the complaint is occasioned by a paralytic state of the nerves distributed to the larynx and glottis, from pressure or some diseased condition in the cerebrum. We can only make room for one of the four cases related by this intelligent physician.

"Case 1.—George Wright, Æt. 16, groom. When first seen, this patient had an attack of bronchitis, which was, however, soon removed by the exhibition of demulcent and aperient medicines, and the application of a blister to the chest: on the 14th of January last, he was considered free from all pectoral complaints.

Nevertheless, at this period, an affection or weakness of voice showed itself; and, on the 16th, it became so remarkable that Wright could only, with the greatest difficulty make himself heard by the bystanders, being scarcely able to speak, even in the lowest whisper. Notwithstanding the presence of this symptom, he did not complain of any pain in the throat or chest, nor was there any dyspnœa; but the patient now for the first time mentioned that he had a severe headach, accompanied by drowsiness and deafness; and, on examining the pupils of both eyes, they were observed to be very much dilated, and almost insensible to the influence of light. It was from these circumstances that attention was especially directed to the cerebral symptoms, which ultimately led me to consider this affection of the head to be, in reality, a principal cause in producing loss of voice in this individual; and subsequent investigation, confirmed by the successful treatment adopted, demonstrated the correctness of the pathological views then entertained.

Five grains of the extract of conium were given at night, followed by an aperient in the morning; and a demulcent medicine was also ordered to be taken twice or three times a day.

Little or no benefit, as might be expected, followed this mode of treatment: on the contrary the loss of voice still continued, and it was latterly even so much affected that the patient some-

times could not articulate a single word; the air during these efforts to speak appearing to pass through the rima glottidis, as if he were blowing a musical instrument, without a note being produced. It also merits observation, that if any alleviation of the pain in the head occurred, and especially if, at the same time, the pupils became less dilated, and were sensible to the impression of light, the voice invariably became stronger and more distinct, thus showing that the condition of the brain, and consequently the function of the nerves distributed on the larynx and glottis, was materially concerned in the disease; and, therefore, it appeared this affection of the head must first be removed, in order to restore the natural tone and strength of the voice.

In accordance with the above reasoning, a blister was applied to each temple on the 24th, which discharged freely, and the patient, when seen on the 26th, was found to have materially improved; the headach was almost gone, excepting over the right eye; the pupils appeared less dilated, and sensible to light, and the words, when speaking, could now be more distinctly articulated, although still in a low tone: the countenance likewise looked clearer, was not so anxious, and, to use the patient's expression, 'he felt almost quite well,' excepting the continued weakness of his voice.

Extract of conium, which had been taken for the last two nights, was continued, and an aperient mixture prescribed in the morning; at the same time more nourishment was allowed, as the appetite and digestion had improved. On the 18th, the patient felt considerably better; the pupils contracted when exposed to a strong light, and the deafness and headach were almost removed; whilst the tone of the voice was nearly natural, and he articulated words correctly, although not strongly. A week afterwards, he had almost recovered his usual voice, had no head affection; and, when seen for the last time, in the middle of February, he was convalescent."

The other cases are equally satisfactory, and we recommend the subject to the attention of practitioners in general.

[From the Medico-Chirurgical Trans. Vol. XVI.]

Observations on the Use of Tobacco as a Local Application in Gout, &c.

BY JOHN VETCH, M. D.

This paper is so very concise that we need not abridge it.

Under other circumstances it had been my intention to give to the public a series of detailed cases to establish the beneficial effects of tobacco as a local application, and one capable of alleviating in a great degree, and of sometimes altogether arresting various forms of specific inflammation, more particularly gout and rheumatic inflammation attacking synovial membrane. Besides the power which this vegetable possesses in allaying the pain and abating the inflammation of gout, it assists the parts most materially in recovering their tone and strength.

The sensible effects of tobacco upon the skin and cuticle are readily perceived, by immersing, for a short time, the fingers in an infusion, or in a watery solution of the extract.

The infusion forms a valuable application in all cases of erysipelatous inflammation, and the only precaution to be attended to, is not to apply it to any part contiguous to the stomach, unless the production of nausea be at the same time desirable.

I was led to appreciate the valuable sedative and astringent power of tobacco in the first instance, by the benefit I derived from it in cases of the last-mentioned class, having many years ago instituted an extensive trial of all the known narcotics, with the expectation of deriving additional aid in the treatment of purulent ophthalmia.

The good and the powerful effects which I obtained from the tobacco, fully compensated for the inefficiency of all the other local applications I then tried; its effects were notorious to all who saw it employed, and I now, as I ought to have done twenty years sooner, recommend its use to general notice, in cases of acute migratory inflammation, and especially when it attacks the joints, testicle, or sclerotic coat of the eye.

The infusion as directed by the London Pharmacopœia is sufficiently strong, and in many cases it is well to rub the parts with eau de cologne after the use of the tobacco.

Charter House, 28th. Feb. 1831.

[From the Medico-Chirurgical Review, Oct. 1833.]

On Burns and Scalds.

BY JOHN MACFARLANE, M. D.

We have drawn attention on several occasions of late to the subject of burns and scalds, because they are accidents that frequently occur, because we think they are often mismanaged, and because there appears to be an idea, that there is something strange and mysterious in the action of heat on the living body. We need scarcely say that this idea is most absurd, and that cases of burn, when philosophically examined, present nothing mysterious or incomprehensible. In order to arrive at definite and rational methods of treatment in these or in any cases, we must study two things—the effects of the injury on the tissues exposed to it, and on the system; and the effects of remedies. The first is an exact investigation, the second an experimental one.

Unfortunately the investigation has been hitherto almost exclusively of the second description. Men have been blowing hot and cold, using stimulants and sedatives, lead and turpentine, but they have not studied accurately the varieties of lesion produced by heat, and the manner in which the lesion proves fatal. The consequence has been confusion, and instead of arriving at simplicity of reasoning and treatment, the profession has been absorbed in the abominable and unintelligible rigmarole of Dr. Kentish. This very instance is a triumphant answer to the opponents of morbid anatomy.

Let us reverse the order of proceeding hitherto adopted in the study of burns and scalds. Let us look at the fatal cases —let us mark the particular and general lesions—let us compare these lesions with the symptoms. Having done this, hav-

ing learnt how burns prove fatal, we may rationally consider what means are adapted to the prevention of that result, and we enter on a course of experiments with remedies, knowing what to seek and what to dread. Any other method than this is false, fleeting, and empiric, and all who propose or sanction it, are embarking in a course of imposture or self-delusion.

The volume of clinical reports before us is valuable as a record of imperishable facts. We have turned to it before and shall turn to it again, for the author does not give us conclusions only, but the means which enabled him, and may enable others to form conclusions.—Such works are valuable in every age, for truth is still immutable. Will the theories of John Hunter outlive the facts of Morgagni?

Dr. Macfarlane relates eleven cases of burn, seven of which were fatal. For the reasons we have stated we will glance at the latter first, although the last in our author's category. We need scarcely say that burns may be fatal at three different periods—in the stage of collapse—in that of reaction—and at any subsequent epoch. It becomes of importance to ascertain the actual cause of death in all these stages. And first of that of collapse. It is manifest that this does not differ from the collapse occasioned by any powerful injurious impression or lesion, unless that lesion be attended with loss of blood. This is an important distinction for collapse occasioned by that which occasions also a great loss of blood, must be very different in many respects from that of burn, where blood is not lost, but merely driven from the surface to the interior. It is probably on this account that consecutive visceral inflammations are, as we shall see, so frequent after burns. Dr. Macfarlane only gives one fatal case of collapse.

Case 1.—*Severe Burn—Collapse fatal.*

M. C. Æt. 2, admitted Nov. 16th, 1826. Six hours previously her clothes caught fire, and nearly the entire upper half of the body was scorched. The integuments of the neck, breast, abdomen, back, shoulders and arms were brownish-colored, hard and completely charred. Warm turpentine was applied, but as it produced acute pain, it had to be removed

and the Carron oil was substituted. Brandy and ammonia were freely given, she was immersed in a warm bath, and all the usual methods for exciting reaction were employed, but without effect. The pulse was not to be felt, the skin was cold, the face pale and sharp, the pupils dilated and immoveable. Leeches were applied to the head, but the quantity of blood obtained was trifling; the stupor gradually increased, the respiration became laborious, and the child died comatose, twenty-eight hours after the injury.

On inspection, the vessels of the brain and its membranes were turgid with blood; there was an increased effusion of serum under the arachnoid and into the ventricles; the lungs were loaded with blood, as were the venæ cavæ and right auricle of the heart; but the mucous membrane of the lungs, stomach and intestines, was healthy.

The circumstances to be remarked in this case with reference to structural alterations, are, the destruction of the integuments, which were killed by the action of the fire and the congested condition of the lungs and brain. Now the latter is no trivial point. We were lately at a medical society, where a gentleman recommended that in cases of collapse from burn, the patient should be put under the influence of opium, and in point of fact, opium is very generally and very indiscriminately used in the collapse of burn. But we see that they die with congestion in the brain, and opium is known to give a tendency to this condition. Here then morbid anatomy shews, or seems to shew, that the administration of opium in such cases is unsafe. Collapse after burn is a state approaching to coma, and coma contra-indicates opium. The indication for opium is extreme restlessness or pain, but this is a condition opposed to what we may denominate comatose collapse. Dr. Macfarlane's observations on this collapse are judicious.

"When the shock is severe, the function of the brain and nervous system being in a great measure suspended, that derangement of the vascular and respiratory systems is produced, which forms so prominent a feature in this class of injuries. This state is characterized by a shrinking and coldness of the body, pale and contracted features, a rapid and feeble pulse,

hurried respiration, and a greater or less degree of insensibility to pain, approaching sometimes to stupor. It may terminate fatally in a few hours, or continue for two or three days before death is produced, or reaction established; the severity and duration of the symptoms depending a good deal on the extent and situation of the injury, the cause by which it is produced, and the age of the patient.

The treatment usually adopted during the stage of prostration, consists in the free and frequent use of diffusible stimulants, with the application of heat to the trunk and extremities of the body;—diluted brandy, with small doses of the carbonate of ammonia and opium, will seldom fail, if carefully administered, in producing the desired reaction. Should we not succeed, however, as will sometimes happen, and there is a risk that the collapse may prove fatal, blood-letting may be adopted. In all such cases there must exist a considerable accumulation of blood in some of the internal organs, to which the imperfect action of the heart, and the feeble and thready pulse, may in part be referred; and should the patient be an adult, and of a robust habit, these symptoms may be beneficially acted upon by venesection, and thus reaction be more speedily established. I have only once had an opportunity of using the lancet during collapse from a severe burn. The usual stimulants had been exhibited for four hours, and failed; but after fourteen ounces of blood were detracted from the arm, a renewal of the stimuli proved more successful, and in less than an hour the heat was restored to the skin, and the pulse became full and bounding."

We should say that the best practical rule is this, to do no more in any way than is absolutely necessary. If we over stimulate, we produce visceral congestion or inflammation; if we deplete, we fear that we may do ultimate mischief, for as collapse occurs chiefly after serious and extensive destruction of parts, there must come a trying reparative process, when all the vigor of the constitution is wanted. We have found warmth applied to the surface a powerful and harmless adjuvant, and we think that the surgeon should give as little brandy as possible. His object is, not to let the patient die of depression. If

he produces reaction it is generally overdone. Coax Nature; that is all.

Children are often carried off by convulsions, within a few hours of the injury, or previous to the fifth day. When these appear early, or are rapidly fatal, slight traces of cerebral disorganization can be discovered. There is no difficulty in accounting for this, as convulsion is usually the consequence of slight structural alterations, or of merely functional derangements. Dr. Macfarlane gives a case in which convulsions occurred on the ninth day.

CASE 2.—*Scald—Convulsions fatal.*

E. S. Æt. 3, scalded August 3d, 1831, on the back, buttocks, lower half of the abdomen and upper part of the thighs. Admission four hours afterwards. The cuticle in some parts was raised into large vesications, and from others it was entirely abraded. Carded cotton was applied, and, as reaction had taken place, the bowels were freely opened, with calomel and castor oil, and afterwards small doses of an antimonial diaphoretic were given. The febrile excitement continued urgent, but the head did not appear to be affected until the 9th. At the hour of visit, the child was restless, and screamed occasionally; the eyes were suffused and irritable, the pupils dilated, the face flushed, and tongue loaded.—*Leeches and cold applications to head.—Small doses of calomel.* In the evening of the 10th, she was seized with convulsions, which continued with but little interruption during the whole night, and proved fatal on the following morning.

On inspection the pia mater was unusually vascular, and there was an effusion of serum, with here and there a small patch of lymph between this membrane and the archnoid. The vessels of the choroid plexus were turgid, and each lateral ventricle contained three drachms of turbid serum. The viscera of the thorax and abdomen were healthy.

Here there was arachnitis, a consequence of extensive scald. On inspection lymph was found between the arachnoid and pia mater. Now leeches were not applied till the 9th, when the pupils were dilated, and it is possible that as that dilatation

was a symptom of pressure, and pressure a consequence of inflammation of some little duration, an earlier application of leeches and blisters might have been more successful. However this may be, practitioners may perceive, that after burns and scalds they must keep their eyes open, and analyse the symptoms daily, that they may not let that pass, as a mere result of the injury, which is really a symptom of visceral inflammation. We will here introduce a case which occurred to ourselves, and is illustrative of the dangers of indiscriminate stimulation.

Case 3.—*Scald—Cephalic Symptoms.*

On the 8th Sept. 1832, the child, Æt. 1½, of Mrs. B., Villers Street, was severely scalded with boiling water on the chest, abdomen, and back. The child was immediately immersed in cold water. A medical gentleman saw it one hour afterwards, and applied the turpentine liniment. We first saw the child on the 11th. It was feverish, with much irritability, thirst, and dark secretions from the bowels. What the treatment was we do not exactly know, as we merely saw the patient casually. We did not see the child again till the 13th, in the evening. There was then more pyrexia—the motions were very offensive—the aspect pallid—the pupils much contracted—no notice taken of surrounding objects. We found that the local treatment still consisted in terebinthinate applications—that the child was taking some bitter infusion—and that it had had three glasses of port wine that day.

We recommended abstinence from wine and the discontinuance of the bitter. On the next day we met the medical attendant in consultation. The child was now insensible—pupils firmly contracted—lower part of cornea covered with a film—face pallid—pulse frequent, jerky—one dark motion in the preceding night. We agreed on the following plan of treatment.

Abstinence from wine and all stimulants—confinement to beef-tea and arrow-root—a powder of hyd. c cret., pulv. rhei, and pulv. tragac. comp., twice or thrice daily. Locally, an absorbent powder, with the unguent. zinci c plumbo. Castor oil. Warm baths.

Before the evening three or four motions were procured, and the child was more conscious, and better in all respects. On the 15th, the head symptoms were nearly gone; the child was sensible, sat up, and took its nourishment well. There was now some diarrhœa.

Pulv. trag. com., pulv. cret., comp. c opio, pulv. rhei, stat.

We need not pursue the details, suffice it to say that the bowels were soon regulated, and that on the 17th the child was able to take a little infusion of bark with infusion of rhubarb twice or thrice daily. The child got well with great rapidity.

We think there can be no question that, had the stimulating system been persevered in, this child would speedily have suffered from effusion in or on the brain, or inflammation of the membranes. But we must pass to other visceral affections besides those of the head.

"Besides the tendency to morbid changes in the brain, severe burns frequently prove fatal, by inducing inflammation of the serous or mucous tissues of the thorax or abdomen. Dupuytren, who appears to have investigated the pathology of the class of injuries with considerable attention, enumerates the following sympathetic or secondary lesions as those which he has most frequently met with; inflammation of the intestinal, gastric, and pulmonary mucous membranes, of the serous membranes of the brain, thorax, and abdomen, and collections of blood and pus in the articulations of the burned extremities. I am not prepared to admit, that the mucous membrane of the digestive organs is more frequently the seat of the inflammation, than the serous membrane of the abdominal cavity, as Dupuytren seems to affirm. On the contrary, I am led to an opposite conclusion, by the dissections I have witnessed. These tend to corroborate the opinions of my friend Dr. Cumin, to whom the profession in this country is indebted for the earliest information on this important topic. He states, in his excellent practical paper on Burns, in the Edinburgh Medical and Surgical Journal for July 1823, that the mucous membranes suffer much less than those of the serous class, and that cavity is most liable to be affected, the cutaneous surface of which is most extensively

injured. I have also observed, that when this internal inflammation commences soon after the injury, and in an acute form, which it frequently does, the morbid changes it produces are usually confined to the serous tissues, but that the mucous membranes suffer more extensively when the disease is chronic, or does not appear till a more advanced period. The first case which I had an opportunity of inspecting confirmed this opinion."

Our experience, so far as it goes, agrees partly with M. Dupuytren's and partly with Dr. Macfarlane's. It tallies with M. Dupuytren's, in making affections of the mucous membrane more common than those of the serous; and with Dr. Macfarlane's, in respect to the periods at which these tissues are attacked. It is not, however, universally true that the mucous membranes only suffer at a late period, for we recently saw a girl die within ten days or a fortnight after a burn, in whom there were extensive ulcerations of the mucous membrane of the stomach and intestines. But to this case we will allude more particularly presently. And now of the cases of inflammation of the serous membranes.

Case 4.—*Extensive Burn—fatal Pleurisy.*

A. M'L., æt. 34, admitted 8th June, 1831, having had his face, back, arms, and front of his chest burned seven hours previously, by an explosion of fire-damp in a coal mine. The cuticle was almost abraded, and the cutis vera and subjacent parts were brownish-colored, hard, and charred. He complained acutely of pain; he had slight shiverings; his extremities were cold, and his pulse was one hundred and eight, feeble. The excoriated parts were covered with lint, dipped in warm turpentine, and in an hour reaction was fairly established. On the following day, the chloride of lime was substituted for the terebinthine application, and the patient remained tolerably easy till the 12th, when, after a violent rigor, he was seized with acute pain in the left side of the chest, impeding inspiration, and accompanied with a troublesome, dry cough, great restlessness, and thirst; tongue thickly furred; pulse ninety-six, hard. There was a discharge of pus from the margins of

the sloughs, which had begun to be detached. Was bled to twenty ounces; twenty-four leeches were applied to the pained part; the turpentine liniment was employed, and he was ordered three grains of calomel and one grain of opium every four hours. Notwithstanding a repetition of the blood-letting, and a continuance of the other antiphlogistic means, with the use of smart purgatives, and nauseating doses of emetic tartar, the symptoms were not relieved in the slightest degree. He was bled, leeched, ordered calomel and opium, and subsequently tartar emetic, &c. but without avail. The symptoms increased, delirium supervened, and he died on the 16th, eight days after the burn, and four from the commencement of the thoracic symptoms.

On inspection, the left side of the thorax contained a pound of sero-purulent fluid, in which flakes of lymph were observed floating; the lung was considerably compressed, and its investing pleura, as well as that portion of the membrane lining the ribs, was of a deep-red color, and covered here and there with thick patches of shaggy lymph. The inner surface of the pericardium was inflamed, but there was no effusion into its cavity. The mucous membrane of the lungs, stomach, and intestines, was natural.

Case 5.—*Burn—fatal Inflammation and Gangrene of the Intestines.*

J. G. æt. eight, was admitted on the 25th of January, 1827, two hours after his clothes had caught fire. The integuments covering the abdomen, pubes, and thighs, were abraded, hard, and presented a greyish-brown leathery appearance. The pulse was so rapid and feeble, as not to be counted; the body was cold, and he had rigors. Warm turpentine was applied, and in a few hours reaction was established by hot flasks to the extremities, and the exhibition of the usual stimulants, after which the bowels were opened by castor oil. On the evening of the 27th, there was a return of the coldness and tendency to rigor; the injured parts were hard and tense; the respiration quick and laborious; the pulse rapid and feeble; the countenance pale and anxious. He was immersed for a few minutes

in a warm bath, and ordered small doses of calomel. On the 31st, there was a great restlessness, alternating with fits of drowsiness, approaching to coma; the abdomen was slightly tympanitic, but without pain on pressure; the bowels were loose; there was no vomiting. He expired on the evening of the third of February.

On inspection, the peritoneum covering the intestines and abdominal parietes was extensively inflamed, and two gangrenous openings were discovered in the duodenum, near its termination. One of these admitted the finger, and from both a free discharge of feces had taken place into the upper part of the cavity of the abdomen, where it was confined by recent adhesions of the intestines. From the lower part of the cavity, near the pelvis, six ounces of a bloody-colored viscid fluid were removed. There was a considerable quantity of blood effused around the capsule of Glisson, and between the layers of the omentum. The mucous membrane of the small intestines showed marks of acute inflammation, but only a slight tendency to ulceration was perceptible. The brain was in a state of congestion, and the ventricles contained rather more serum than natural.

Dr. M'Farlane observes that burns, occurring during the period of utero-gestation, are apt to excite premature labor, with or without the presence of abdominal inflammation. In one case which occurred to our author, repeated and profuse uterine hæmorrhage occurred, apparently from detachment of a portion of the placenta. The patient would have sunk, had not artificial delivery been resorted to. Our author details in full another case of burn during pregnancy. The patient, æt. 44, was in the eighth month; the abdomen, pubes, and thighs were severely scalded. On the 4th day she had a rigor, followed by acute pain in the right inguinal region, which speedily became diffused over the abdomen, with alarmimg symptoms. By bleeding to 58 ozs. calomel and opium, &c. the symptoms were gradually subdued. On the 8th day after the reception of the burn, pains came on, and, after a severe labor of seven hours, she was delivered of a dead child. What is curious, there were several bullæ on the child's abdomen and thorax, al-

though there was no appearance of commencing putrefaction. This patient slowly recovered.

So much for the cases of serous inflammation. Our readers will perceive that, though analogous in some respects with the secondary serous inflammations, after injuries and operations, they are, if we may be allowed to build any thing on the last case, less inevitably fatal. We must, however, wait for more facts before we decide. We proceed to those cases in which the mucous membrane was affected, and we do this the more willingly, as we believe that many false notions prevail on this head.

Case 6.—*Burn—fatal Ulceration of the Mucous Membrane of the Intestines.*

M. M. æt. 5, admitted Feb. 23d, 1826, with extensive burn of the abdomen and back, from her clothes having caught fire. On May 1st, more than one half of the ulcerated surface was healed, but she was emaciated, and the health impaired. On June 1st there was only, on the hypogastrium, a sore an inch broad and three inches long. This part ceased to heal, and the granulations became pale-colored, and gelatinous. No febrile excitement, however, took place; the appetite continued good; the bowels regular; and the tongue clean. On the 19th, after a slight rigor, she complained of pain in the abdomen, midway between the pubes and umbilicus, which was aggravated by pressure; the pulse was quickened, the heat of skin increased, the tongue furred, and the bowels loose and irritable. Leeches and fomentations were applied, and she had a small dose of *oleum ricini*, followed by *calomel* and *creta*, a *warm bath*, &c.

On the 20th she had another rigor, followed by increased febrile disturbance, diffuse pain, and slight tympanitic swelling of the belly; a very rapid and feeble pulse, urgent thirst, vomiting, diarrhœa, and an anxious collapsed countenance. In the course of a single night, the granulations were absorbed from the unhealed sore, a hollow cavity produced, which was pale-colored, smooth, glassy, and dry. A considerable portion of the new cicatrix reulcerated. She became gradually more and

more exhausted, and expired on the evening of the 28th, about four months after the reception of the burn.

On inspection, there was very slight peritoneal inflammation. The mucous membrane of the lower half of the duodenum, and of the jejunum and ileum was very vascular, infiltrated both with blood and serum, and extensively ulcerated.

Dr. M'Farlane remarks, that it is difficult to acount for the peritoneal inflammation at so late a period. It seems to us that the peritoneal inflammation was rather dependant on the affection of the mucous membrane, than immediately on the burn. Every one accustomed to the examination of bodies is aware that peritonitis is a very common attendant on ulcers of the mucous membrane in fevers, &c. and the relations of the tissues are sufficient to account for the fact. The following remarks appear to us to be more pertinent.

"When, from the extent and severity of the burn, a high degree of constitutional irritation has been excited, and so long maintained as to have impaired the health, and produced considerable emaciation, it not unfrequently happens that chronic disease of the alimentary mucous membrane supervenes. This cannot always be attributed to the direct influence of the local affection, but it must sometimes depend on the continued constitutional excitement which the injury has produced. There are many chronic diseases which ultimately lead, in this way to an inflamed, softened, and ulcerated state of the alimentary mucous tissue; and where the secondary disease is to be referred to the injurious excitement which has been so long maintained."

There can be no question that fever, however induced, will, if long kept up, induce local inflammations and alterations, in organs or tissues remote from that where the orign of the fever exists. Thus, the hectic occasioned by disease of the foot becomes the cause of disease in the lungs—or, if produced by disease in the lungs, it gives rise to ulceration of the bowels—the symptomatic fever of a suppurating limb, after compound fracture, is the precursor of the visceral inflammations or deposites and so on. It is highly necessary to attend to these facts, even if the principle we have founded on them is disputed for, practically speaking, we have always reason to dread the

existence of such fever, and should endeavour to get rid of it. This can only be done, of course, by removing the cause.

CASE 7.—*Severe Burn—fatal ulceration of the Intestines.*

M. M'D. Æt. 18, admitted Jan. 2d, 1832, having had her clothes set on fire a few hours previously. The back, nates, perinæum, labia and thighs were vesicated, denuded of cuticle, and in some places charred; the pulse was rapid and indistinct, the thirst urgent, the body cold, and the restlessness great. The parts were put up in cotton, and when the febrile excitement commenced, a purgative was ordered. The pulse continued rapid; she was obliged to lie constantly on her face; and as her habits were most filthy, and she voided her urine and feces in bed, the sores healed very slowly. From these causes, while the other parts had nearly cicatrized, the right thigh became sloughy, the appetite impaired, and the bowels irritable. Her strength continued to diminish daily; diarrhœa set in, with occasional vomiting; the countenance became Hippocratic, and she expired on the 12th February.

On inspection, there was found superficial and deep-seated congestion of the brain, with serous effusion under the arachnoid, and into the ventricles. The liver was immensely enlarged and tuberculated; the mucous membrane of the small intestines was injected, tumid and ecchymosed; the ileo-cæcal valve was in a state of ulceration, as were occasional portions of the colon and rectum.

Dr. M'F. imagines that, by strict attention to the state of the bowels and the skin, he has occasionally succeeded in warding off these attacks of internal inflammation, even when there were premonitory symptoms. We would beg to draw attention to the affection of the mucous membrane of the intestines after burns. Nothing is more common than to hear two remarks, one of which is imperfect—the other, for the most part, erroneous. The remarks to which we allude are these:—First, that diarrhœa is a consequence of burn, and often a good sign; and, secondly, that patients die of exhaustion from burn, meaning, we suppose, that they die because they cannot live.

With respect to the observation on diarrhœa, it is, as we have said, imperfect. The diarrhœa is a sign of that condition of intestinal mucous membrane, which if neglected or maltreated, or even managed with the utmost care, is the prelude to the ulcerative action. When that diarrhœa appears, the judicious surgeon will regard it with a jealous eye, and adopt the treatment applicable to chronic muco-enteritis. A patient is usually constipated soon after the infliction of a burn, and the constipation as usually gives way, in three or four days to diarrhœa. We have seen a most uncontrollable looseness brought on by the impatience of the surgeon, in throwing in powerful cathartics during the torpid condition of the bowels alluded to. Let him wait till Nature is inclined to work, and let him rather entice her by mild aperients or injections, than force her by drastic purgatives. He will usually have purgation enough before he has done with the case.

We have said that the remark on patients dying of exhaustion is probably erroneous. It is possible, no doubt, that a patient may have such extensive ulceration of the skin as to prove, in itself, a cause of death. But this is not generally the case, and in this, as in other instances, death is produced by visceral disease, usually ulceration of the mucous membrane. The surgeon who believes his patient is dying of exhaustion, will probably order additional support, if not stimulus, as his patient seems more exhausted. The surgeon who is aware that visceral disease is being established, will know that such treatment is certain to be destructive. He will support without stimulating, and will attend to the secondary alteration.

The majority of those whom we have seen die, at any distance of time after the infliction of the burn, have certainly sunk from ulceration of the intestinal mucous membrane. We lately saw a remarkable instance of perforation of the stomach, in consequence of an ulcer which began in its mucous coat. There had been hæmatemesis and voiding of blood by stool before death, which took place rather suddenly ; the abdomen was tender on pressure. On examination, there was slight peritonitis, and the perforation we have mentioned. There were various other ulcers in the stomach, and ulcers, also, at

the termination of the ileum. The patient died between the second and third week. To this case we alluded in a preceding part of this article. In another case of death after burn, we saw similar ulcerations of the stomach, unattended with perforation.

A case of tetanus after burn is related in the Glasgow Medical Journal, for April of the present year. Tetanus, being a comparatively accidental consequence of any injury, is not possessed of much interest here. We notice the case for the sake of the dissection. The patient was an epileptic, and the part chiefly injured was the right upper extremity. Trismus appeared on the 12th day, and death occurred on the 17th.

On dissection, the anterior roots of the fourth and fifth cervical nerves of the right side were of a bright red color, compared with those above and below. Two of the middle nerves of the brachial plexus of the right side were of a dirty yellow colour, perfectly distinct from the characteristic whiteness of the phrenic and vagus of the same side. This appearance commenced about an inch above the clavicle, and was traceable downwards into the axilla. The sheaths of these nerves, in the same situation and to the same extent as their discoloration, were sensibly reddened, and numerous distended red vessels were seen in their texture. The median and ulnar nerves were of the same yellow color, in the greater part of their course through the diseased parts, and their neurilema was injected for two inches below their origins from the brachial plexus.

This article has, so far, been confined to the secondary consequences of burn, to the morbid anatomy, to speak improperly, of the lesion, and to those practical deductions which may obviously be drawn from the dead body. The remainder, and it will be short, applies to the treatment of burns and scalds, independently of visceral complications.

The treatment of burns and scalds recommended by Dr. Macfarlane is this—when the cuticle is extensively vesicated, and the surrounding integuments inflamed, the immediate application of finely-carded cotton, the vesications having been previously punctured. Several layers of the cotton should be

applied, and retained in close contact by means of a roller. Two cases are related, illustrative of the good effects of this treatment in superficial burns, in which Dr. M'F. observes that its advantages are most conspicuous. Dr. M'F. however, has found it very effectual in cases where the disorganization is deeper.

A case is detailed, in which the application of cotton combined with generous diet and wine, affected a cure.

"When the burn has penetrated deeply, and the eschar is still adherent, I prefer applying the turpentine liniment, or a solution of the chloride of lime, to the use of cotton. I seldom have recourse to poultices for the purpose of facilitating the detachment of charred integuments, these warm and emollient applications, although decidedly useful in accelerating the ulcerative disunion of the sound and gangrenous parts, tend to induce exuberant and spongy granulations, and of course to establish that kind of unhealthy action which forms so serious an obstacle to cicatrization. When the injury is confined to the trunk of the body, the turpentine liniment is employed; but when the extremities are implicated, I have found the chloride of lime solution infinitely preferable. When these applications are had recourse to, several layers of fleece cotton are laid over them, and the dressings are seldom removed until the sloughs have become detached, and a change of the treatment is required."

Dr. M'F. however has found the cotton injurious in some cases, and these he mentions generally in the following summary.

"In three cases of simple vesicated burns, the application of carded cotton, soon after the injury, was productive of such acute and continued pain, that it had to be removed, and a different remedy employed. In two cases of superficial burns, where the cutis vera was in a state of ashy-grey ulceration and the surrounding integuments presented a bright red color, the local and constitutional excitement was so great, as to render the discontinuance of this application absolutely necessary. In four cases, during warm weather, the discharge was so profuse,

the fetor so intolerable, and the generation of maggots so abundant and annoying, as to require a daily change of the dressing; and besides these inconveniences, the health of the patients became greatly impaired, and the appetite diminished, and, in one of these cases, incessant vomiting and diarrhœa were excited. When these untoward circumstances manifest themselves, and especially when the injury is confined to the limbs, I have found the application of a solution of the chloride of lime exceedingly beneficial. In one case, where the front of the chest and abdomen was scalded with boiling water, lint, moistened in a solution of the chloride (containing gr. ij. of the salt to an ounce of water) was applied and kept wet for ten days before it was removed, when nearly two thirds of the abraded surface were cicatrized. The second dressing was removed four days after, when the cure was complete; acute pleuritis however occurred, and required free bleeding, purging, and the use of emetic tartar in solution. In another case, both lower extremities were scorched by the clothes catching fire; and, of course, the injury extended deeper than in the former one. The same treatment was pursued, although, from the nature and situation of the injury, and the advanced age of the patient (fifty-nine years), the cure was more protracted. The first dressing was removed on the twelfth day, when the greater part of the leathery slough, produced by the destruction of the cellular texture, was found separated, exposing a florid granulating surface. The lotion was re-applied, and continued nearly three weeks longer, before cicatrization was completed.

I consider this a very excellent application to burns; it stimulates moderately, destroys fetor, and, when surrounded with oiled silk, it maintains a degree of heat and moisture, favorable to the separation of sloughs, and to the subsequent cure. In my estimation, however, no small share of the credit is due to the mode of its employment. Instead of removing the dressings daily, and thus exposing an extensive and inflamed surface to various sources of irritation, they are allowed to remain for several days, care being taken to keep the parts constantly moist, by the assiduous application of the lotion. The

injured parts are thus preserved in a state of perfect quiescence, and all external interruptions to the healing process are avoided. Before the lotion is applied, if the vesications are large and tense, it is necessary to evacuate the serum by a number of small punctures, allowing the detached cuticle to remain, which forms a useful covering to the tender surface, and does not interfere with the subsequent cicatrization. Should the burn be extensive, and confined to the trunk of the body, the constant retention of wet dressings has sometimes chilled the patient, and given rise to internal inflammation; in such cases cotton is the preferable application, but when the extremities are involved, I have found the solution of the chloride of lime on many occasions eminently successful."

A case of burn of the face cured by chloride of lime, is detailed. It presents no features of interest. We have now concluded that part of Dr. Macfarlane's book which relates to the subject of burns, and we make no apology for the length of the notice. We are satisfied that practitioners are too generally unacquainted with the true pathology, and, consequently, correct treatment of these injuries.

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