adopted in cases where the epidemic disorders have seized on suffering humanity. We ought neither to hesitate, nor pause, nor tire, until we have determined some means, definite in their design, by which some reduction of their 25 per cent. of mortality shall be secured. At the present moment our practice, although successful in regard to symptoms of a superficial kind, is vague, contradictory, and unsatisfactory. It will remain thus until an effort is made to reform it. Worse it could not well be; better it must be. To inaugurate the reformation, to ascertain the way we should go, we must first determine the essential differences of various epidemic disorders. If it be true, as has been suggested, that one class of these affections is accompanied with excessive formation and with separation of fibrine, it will follow that those remedies should be as nearly as possible specific which check this formation, tend to hold fibrine in solution, and prevent decomposition. Such remedies are certainly in our hands, and in a rude way their value has been determined; what is wanted is a more rigorous analysis of their worth. At this moment, the remedies to which reference is made are two in number: ammonia and the sulphites. Ammonia, first introduced into practice in the treatment of scarlet fever by Dr. Peart, has since been used by Dr. Witt, by myself, and by other physicians, with a success in this particular disease which may be considered almost as specific; it has also been used with equal success by Mr. Swann of Barrowden, in the treatment of the allied disease diphtheria.

The sulphites of soda and potassa, introduced first to notice by my honoured friend Dr. Polli of Milan, appear to act equally well, and even to prevent death after the injection into the veins of animals of pus, decomposing albumen, and decomposing blood. The action of both these remedies is the same; both produce their effects, not by removing oxygen nor by combination, but simply by arresting the modified fermentative process that has been excited. But in using these remedies we must be cautious that we overstep no bounds; and that with each disease we determine whether it be advisable to increase or to reduce the fermentative change. In that class of disease where there is great solubility of blood, it appears to be a more reasonable practice to facilitate the organic changes, by remedies which hasten metamorphosis, and neutralise the alkaline products. Hence the acknowledged although partial value of mineral acids in typhus; hence, probably, the reason why typhus disappears, as a disorder, beyond a certain degree of temperature. And, again, as every fermentative change, as every organic change, turns in fact for its development on the motion imparted to the ultimate molecules through heat, we have a great lesson yet to learn in miniature, from those grand series of geographical facts to which I have briefly referred on a previous page. What is true of the world at large as a great chamber, is surely true in smaller chambers; and it is not unlikely that experience will yet show that, by artificial variations of cold and of heat, all the epidemic diseases may be effectually commanded.

In conclusion, in the matter of treatment, we have had recently opened for our inquiry certain important lights relative to the removal and the destruction of those organic poisons which float from the bodies of the sick. I do not refer to ventilation, nor to cleanliness; those are implied and are locked up in the conscience of every well informed medical man; but I refer to the employment of various vapours which, diffused through the air of the sick room, destroy the organic particles, and render the air pure and inoffensive. Through an observation of Mr. Hoffman of Margate, which I have endeavoured to elaborate, we have now placed in our hands, a means so simple, so practical, so effective, that I have ventured to break through the dignity of an introductory address to bring it here in the way in which it is

applied. The substance employed is simple iodine. It is used both in a permanent, and in a special manner. For permanent use, the iodine is merely placed in a common chip-box, or in a glass, covered with a layer of muslin. For special purposes, the iodine, placed in a saucer, is volatilised by the heat of a candle into the air of the sick room, until the odour of iodine is just perceptible at all points. By this means, in one of the severest cases of confluent smallpox I ever saw, and which I attended last summer in consultation with Mr. Hubbard of Kensington Gardens, we were enabled to deodorise the air of the patient's apartment with a facility and a comfort I have never before experienced. The process contributed, I think I may say, largely to the recovery of that case.

Iodine, thus used, also affords a good practical index as to the purity of the air in an apartment. If, on volatilisation, the odour of the metalloid be long in being developed, the evidence is clear that the air is proportionately charged with organic matters.

But our prospect must come to a close; not because there is an end of it, but because the time presses, and in that which has been presented, there is ample work offered for all our thoughts and all our hands. The work, moreover, is hard, and for a time inglorious; but in its aim and end, it is one of the greatest of all pursuits in medical science and art. It is the kind and form of work moreover, which can alone give to our profession a vitality amongst vitality, and a voice amongst the voices of mankind. So long as we only loiter and hide ourselves in the sick chamber, we are entombed with the living dead, and we appeal merely to the judgments of those who are too feeble to test whether our art, as represented by us, is pretence or reality. It is not our duty, it is not the duty of anyone of us, to leave the sick chamber; for he who knows not intimately what is going on within, knows little more of what is influencing from without; but it is the duty of all of us in this advancing day to know the outer as well as the inner chamber; and to make ourselves appreciated as men who understand disease in its social and moral, not less than in its scientific bearings.

Through no section of the body medical does the opportunity offer itself for proving the breadth of our learning, so perfectly as through this Society; and in the sketch I have ventured to draw, as preliminary to the labours of another session, I have tried to indicate the readiest and most sure way by which our efforts may be crowned with success; by which we may appear to the world as statesmen not less than citizens, and as kings as well as priests.

ILLUSTRATIONS OF THE DIFFERENT FORMS OF INSANITY.

By W. H. O. SANKEY, M.D. Lond., Medical Superintendent of the Female Department of the Hanwell Asylum.

[Continued from page 522.]

THE feelings or moral faculties are the first to be affected in melancholia, and also, it is true, in most other forms of mental disease. In fact, the prominent phenomena of insanity, in the majority of the cases, are connected with this division of the mental faculties. In melancholia, the disease involves also, as it advances, the intellect on the one hand, or the motility on the other; or, in some instances, both the intellect and the motility together.

Motility is affected in two modes in melancholia. In some cases, there is excess of motion—restlessness, fidgetiness, or constant movement; and the disease in these cases has been called *melancholia agitans*. In other cases, there are torpor, inaction, hebetude; and in these the disease has been named

melancholia with stupor, and also, but less correctly, acute dementia.

The last case narrated was one in which there was an amount of restless motion, which approximated it to the kind of disease to which the name of melancholia agitata is given. The term is merely descriptive of a variety: it is not pretended that there exists any essential difference in such cases. Such shades of variation are met with in the non-morbid expression of grief. For example, around the deathbed of a patient, or at any other scene of a painful character, we may see the genuine and normal feeling of grief very differently manifested in different individuals, and even among different members of a single family. In some, there is a perfectly quiet state of the muscular system; a torpor even of the muscles of expression; a fixed gaze; a semi-stupified or blank stare, in which grief does not even seem portrayed. The individual also sits or stands motionless. In others, especially in females, there is seen a restless motion of the entire system; the face is expressive of the mental pain. If the person sit, she is constantly twisting or altering her position, or she rocks backwards and forwards; or, if up, she will walk to and fro, frequently changing the position of the hands—now on her neck, now clasping them, now twisting a string, with a greater or less amount of control, according to the amount of education, etc. Among the Irish poor, the muscular system is much brought into action: there are wringing of the hands, sawing of the air, etc. In one class of persons, grief is attended with silence; in another, with loud lamentation. And it is so in disease. My notes furnish me with many more or less perfect cases of this form of melancholy.

CASE VII. A. H. A second or third attack, and a re-admission. The patient was first admitted in 1856. She was then 30 years of age. The attack commenced during a first pregnancy; but it was reported at the time that she perfectly recovered prior to her delivery, but was taken again (making the second attack) immediately after her child was born. The labour was easy; the child was healthy. The patient, a few days after its birth, became much excited, and was taken to the workhouse. There she speedily improved; and, on her discharge from the workhouse, she went to her own relatives in the country, became worse, and was brought back and admitted into the asylum within three weeks after parturition. On her admission, it was stated that she raved, screamed, and was excited and depressed alternately; while at home, she tried more than once to jump out of the window, and made an attempt to strangle her infant. She gradually recovered, and was discharged cured from the asylum six months after the date of admission. She was readmitted after a lapse of five years.

She was then 35 years of age, the wife of a coach-painter. There was hereditary tendency to insanity in the family. She had a sister, and an uncle on the maternal side, insane. Her mother was a person of feeble intellect. The patient had been subjected to severe privations of late. The husband had been out of work for some months, and they had had to part with the furniture and clothes for food.

Since the former attack, the husband related that he had found his wife to be much altered in disposition. She was formerly cheerful and particularly lively, but had since been melancholy and suspicious. She was confined with twins five months ago, and was suckling both when she was taken ill. One of the children was born blind; they were both very feeble and sickly. (Both children died soon after the patient's admission.) She had been gradually becoming more and more dull and neglectful of herself and home since her confinement. She had been several times violent, and had attacked her husband.

150th Day. She was emaciated and exhausted; was very perverse and restless, struggling to get away, re-

sisting any attempt to lead her, and always endeavouring to go in the opposite direction. She was constantly exclaiming, "I am on fire; it's sinking; we shall be burnt." She refused her food; would not go near the dinner-table. She had an anxious and wild expression.

On the following day, she had passed a restless night; she had an anxious frightened expression. She said, "It is the gas; I can taste it and smell it." She addressed me by name; evidently, therefore, remembering me. The pupils were both small; the conjunctivæ injected; the hands were tremulous. She was constantly on the move, rocking to and fro on her feet. She looked back, or from side to side, clasping her lips with her hands, etc. The tongue was furred. Her bowels had not been open. She took food, but with reluctance. Her pulse was rapid. The skin was moist.

152nd Day. Her mental agitation remained the same. She was constantly saying that she was on fire. She said I was writing down what a wicked wretch she was; accused herself constantly of different things, frequently iterating, "I have done it; I have done it; I have burnt all." The expression of the countenance was wild and anxious. She was restless, constantly moving. She went hither and thither in an unsettled kind of manner, and looked about nervously. The eyes were glossy; the conjunctivæ were not injected; the cheeks were flushed; the skin was moist, greasy. A few spots of acne were seen on the face. The tongue was moist. She took her food. She had had no stool since admission. The pulse was rapid; the breathing quiet. There were no morbid chest-signs. She was ordered to have half an ounce of castor oil directly.

153rd Day. The oil acted well. She required persuasion to make her take her food.

155th Day. She slept all night, and was less wild in expression. She had taken food well to-day, and talked less about fire.

The notes from the 156th to the 162nd day show a gradual diminution in the restlessness. On the latter date, she was quiet; no longer restless, nor so distressed; but was still depressed. She was little disposed to speak. She took food well. The castor oil was repeated on the 159th day.

179th Day (or 29th after admission). She was more calm and comfortable, but had not employed herself yet. The expression was stern; the eyes were glassy and ferrety. She sat tranquilly, and slept well. She could not remember being admitted. The tongue was moist and clean; appetite good; pulse 80.

From this date, her condition progressed very slowly. She remained tranquil; but was dull and reserved, though she gradually improved and became industrious. Her bodily health also underwent a very gradual amelioration. She required the occasional use of aperients; and she remained pale and thin for some time. She was ultimately discharged recovered, but not until nine months after admission, or at about the fourteenth month of the attack.

The treatment consisted as much, of course, in the regular exercise, occupation, and diet, etc., as in therapeutical agents; and also of the moral means employed, as the association with trained attendants, the cheerful amusements and occupations provided, the effect of which must not be lost sight of in the treatment of all the cases narrated.

In the next case to be related, the motility was involved to a still more marked degree. The notes are somewhat lengthy; and the case will, therefore, be given more in the form of a narrative.

CASE VIII. A. J., a female, single, aged 23, was admitted in April. She had been formerly a domestic servant, but lately a dressmaker. She was reported by her aunt to have had, when a child, a slight strangeness in her conduct, and to have had the idea that she had

committed some unpardonable sin. The aunt, however, gave but a very obscure account of this circumstance; and nothing satisfactory could be made of the story. The attack was reported in the order of admission to be of fourteen days' duration; and nothing more is known about it.

On admission, the patient gave a lucid account of her own mental state. She appeared clear in her intellect and memory with respect to what had passed. She talked in an excited, rapid manner; said she was tormented with the thought that she had rejected Jesus; that she had felt that she did not and could not believe in him; that she had curious sensations and violent beatings of her heart; and felt that her "thinking mind" was gone. All this, and much more of similar kind, was told in a fervent, anxious tone of voice. The sentences were uttered in a very rapid but connected manner, and were interspersed with deep groans. She complained also that she could not sleep; she said, "Oh, when I close my eyelids, the events of the past fortnight come before my eyes." She was all the while on the move; resting first on one foot, and then on the other; looking anxiously about her; frequently turning her head; even while speaking, fidgeting with her apron-string; biting her nails, which bled and were torn by her frequent biting. The expression was anxious, piercing. Her trunk was bent eagerly forward toward the person she addressed. Nevertheless, she did not appear ill, except from a slight pallor which was present. The tongue was moist; the bowels were regular; and she took her food well. Pulse 90. Not much variation in the case occurred up to the thirty-fifth day; the admission being on the fourteenth. The constant mental anguish, restlessness, and agitation of body; the same gloomy thoughts on religion—that she had neglected the Saviour—continued.

35th Day. She said she was possessed of the devil; that she was obliged to say, "God preserve my body, and the devil take my soul;" and since that she had been worse. She felt strange sensations in her inside, like something hot. The countenance was more haggard; the restlessness was unabated. She had no pain in the head; she ate heartily; the bowels acted regularly; the tongue was furred.

Aperients were repeated every other day for ten days, without any apparent benefit. The tongue remained furred; her mental anguish and constant restlessness continued. The pupils on the thirty-seventh day were observed to be dilated, but equal. On the forty-third day, opiates at bedtime were prescribed, and continued for five days. She slept rather better for three nights; and then no further benefit accrued, as noted in the following remarks.

48th Day. The same mental condition continued. The draught had been gradually increased in strength, but now produced vomiting; and the appetite was not so good. The restlessness and agitation, and the belief that she was tormented by the devil, were unabated. The pupils were large, but equal. The head was ordered to be shaved, and a blister applied to the scalp.

49th Day. She was worse. She was extremely agitated; made several attempts to seize the carving-knife at dinner, both yesterday and to-day. She continued to exclaim, "The old devil's got me." She rushed about from place to place.

50th Day. A slight difference was observed between the pupils, the left being rather larger than the right.

52nd Day. She had an anxious, wild expression; and was constantly moaning aloud, "Oh! that old devil!" The restlessness continued; she rocked from foot to foot while standing; twisted her apron-string; pinched her flesh; bit her nails. She made repeated attempts at suicide; but took her food, and slept well after taking a drachm and a half of tincture of henbane at night, Pulse 120.

56th Day. She was more tranquil. The same illusions and delusions continued, but with less force. She said she was prompted to evil by the devil; that the devil made her think all sorts of wicked things. She said she was to live for ever. She had continued to take the henbane regularly. The pupils were both large, and acted irregularly. She slept better. The tongue was clean. She took food well.

78th Day. The notes do not show that her condition was materially altered up to this date. The anxious expression, restlessness, and agitation still continued. On this day, she said "she was married to the devil", which was a new horror to her. She had also the delusion that one of the other patients was the Saviour, and was constantly going down on her knees and praying to her. The patient addressed was worried and annoyed by her importunate entreaties, and treated her rudely, repulsing her; by which A. I. became greatly agitated. She was thinner, but ate well. The bowels acted daily.

84th Day. She had a fresh delusion—that a newly arrived patient was the Virgin Mary; and that a baby in the ward, belonging to another patient, was the infant Saviour; and that the father of the infant, who called to see his wife, was God. She addressed her prayers to all of them. The agitation and constant motion continued. She had not made such determined efforts to injure herself. She was constantly tortured by vain regrets; as, if she had done or said this or that, then other consequences would have occurred. She was constantly imploring God to pardon her.

From the 84th to the 123rd day, there was a slight amount of improvement. On the 123rd day, she had constant mental torment, but slightly less severe. She still followed me about, saying, "Oh, do give me one more chance." She was in a restless state; had picked her ears, which were bleeding. The nails were sore from being constantly bitten. The tongue was clean. The bowels had been inclined to be constipated for some time past. She said she felt as if she had no inside. She had not menstruated since admission. She was ordered to take aloes and mastich pills daily.

128th Day. She was more tranquil, but still moaned when addressed. The bowels acted regularly. She had gained flesh.

144th Day. She was depressed, and cried when spoken to; but continued more tranquil. She was ordered to be taken out for continuous walking exercise twice daily.

She was induced to work in the laundry on the 154th day, where she continued gradually to improve; and on the 182nd day, it is noted that she was occasionally dull, but continued to work well. On the 187th day, menstruation became re-established. Her improvement progressed daily from this time. She continued to be constantly employed in domestic work from the above day up to the date of her discharge, which was on the 390th day; but the last two months of the time she spent at home with relatives, being "absent on trial".

Medicines did not appear to have much influence on the foregoing case. Aperients were fairly tried, without any marked benefit at the earlier period of the case; though towards the close they appeared to assist in re-establishing the catamenia. Opiates and sedatives were tried to relieve the restless agitation, and their administration appeared to have a temporary benefit only; but the transient effect appeared to be of use in allowing the moral means of employment in the laundry to be commenced. Shaving and blistering the scalp were followed by no good result; the patient was more excited, indeed, after them than before; but the suicidal excitement commenced before the remedy was applied. The greatest benefit was derived from the moral treatment, and with exercise, occupation, and constant employ-

ment, which were resorted to as early as the patient could be made to use them.

[To be continued.]

Transactions of Branches.

READING BRANCH.

REPORT OF THE READING PATHOLOGICAL SOCIETY.

By H. COLLEY MARCH, M.B.

[Continued from page 549.]

PUERPERAL CASES.

Infection from Erysipelas: Puerperal or Typhoid Fever.

A deeply interesting puerperal case was related by Mr. HARRISON. He stated that, on Sunday, March 16th, 1862, a lady was delivered of her fourth child by an easy natural labour. She progressed perfectly well till Tuesday evening, when she was seized with a decided rigor. The lacteal and the lochial discharges, however, were not interrupted. On Wednesday, she took a dessert-spoonful of castor-oil; this caused one feculent evacuation, which was followed by a continuous involuntary watery discharge from the bowels. Late in the evening, when forty minims of tincture of opium were given, the skin was moist; the countenance distressed; the pulse soft, flickering, and very irregular. She complained of severe pain over the whole of the right side of the body, but especially over that of the thorax, increased by turning towards it, and aggravated by the movements of respiration. When she lay quite still, her breathing did not seem embarrassed; nor could any abnormal sounds be discovered by percussion or by auscultation. She was not distressed by gradual firm pressure on the abdomen, which was not at all tympanitic; but the entire surface of her body was intensely sensitive. She complained of acute pain when she was touched ever so gently, and almost screamed when the finger was suddenly laid upon her tongue. This organ was moist, and its papillæ were slightly elevated. Three grains of calomel were administered, and two hours afterwards, as the diarrhoea still continued, a starch enema, containing twenty minims of laudanum.

On Thursday morning she appeared better; the diarrhoea had ceased, and she had slept. The lochial and lacteal discharges continued natural; but, as the effort to suckle her infant fatigued her, it was abandoned. She took some citrate of ammonia every three hours. At ten o'clock in the evening she was seized with a sudden collapse, and vomited a large quantity of greenish odourless liquid; after which she felt relieved. A similar seizure came upon her towards morning, and again in the evening, when, in spite of the administration of stimulants and nutritive enemata, she expired; her death occurring on the sixth day after labour. There was no *post mortem* examination. Mr. Harrison did not see the case till the last day, and it was then hopeless. Its interest arises from a consideration of the nature of the disease that proved so destructive.

Dr. H., who saw the patient, considers that she died of typhoid fever. Mr. Harrison, on the contrary, believes the malady to have been *puerperal* fever; but both gentlemen agree as to the mode of infection. There was in the neighbourhood, a virulent case of erysipelas. The same medical man, and the same nurse that had attended the case of erysipelas, came to assist the delivery of the woman in question. Under these circumstances, if no evil consequences had arisen, she would indeed have borne a charmed life. The accoucheur, it is true, between his attendance on these two cases, delivered a woman who most fortunately did well; but the nurse, though strict ablution and change of at-

tire were enjoined upon her, went directly from one bedside to the other.

Dr. H. believes that a poison of an erysipelatous origin, was imported by the nurse, and being received into the system of the patient by her lungs, was developed into typhoid fever; and he bases his opinion on the facts, that there were no signs of pulmonary or hepatic abscesses, and that the very prominent intestinal symptoms were of a decidedly typhoid character.

But, on the other hand, no one has ever known the poison of erysipelas to produce typhoid fever, or that of typhoid fever to give rise to erysipelas; while it has been proved by countless instances that erysipelas and puerperal fever are convertible—either into the other. Thus, there are very strong *à priori* reasons for believing that the case in question was one of puerperal fever; and it is left to inquire whether the symptoms necessarily *exclude* such a conclusion. Quite the contrary, as it would seem; for, while the absence of an autopsy leaves undecided the existence or non-existence of pyæmic suppurations, there was undoubted evidence in the painful breathing of some pulmonary mischief; and nothing is more certain than that, in instances of putrid infection, there is often a violent natural effort towards the elimination of the poison by the intestinal mucous membrane. And in fine, the very marked hyperæsthesia of the skin is a symptom explicable far less by the typhoid, than by the puerperal theory. The means of preventing the occurrence of puerperal fever was a subject that the Society earnestly discussed; and strongly recommended that gentlemen engaged in obstetric practice should exercise extreme caution in attending any patient whose disease might be of an inflammatory nature, and should never, on any account, personally make a *post mortem* examination.

Death of Fetus in Utero: Removal: Recovery. Mr. VINES related the following case. On July 15th, 1862, he saw Mrs. H., a woman of strumous habit, aged 32. She had been married six years, but had had no child. The catamenia had ceased eight months previously, and she quickened at the usual time. Seven days before she was seen, some water came away *per vaginam*, followed by a continuous offensive sanious discharge, and by aching pains in the back and bowels. On an external view, the uterus, instead of lying in its usual site in the median line, occupied a laterally oblique position. On a vaginal examination, the pelvis was found much contracted; Mr. Vines estimating the antero-posterior and lateral diameters of the brim respectively at $2\frac{1}{2}$ and $3\frac{1}{4}$ inches, and of the outlet respectively at 4 and 3 inches. By no efforts could the os uteri be reached with the finger. A solid tumour was felt pressing down, as it were, towards the hollow of the sacrum. It was conjectured that the uterus was displaced, and its os tilted forwards behind the symphysis pubis; but the woman had at no time any difficulty in evacuating either rectum or bladder.

The pains continued of the same non-parturient character, and the symptoms remained unaltered, till the 17th, when portions of a brain-like substance passed down the vagina. On the 18th, on examination, the head of a child was felt presenting; the scalp loose, and the cranial bones collapsed. As the labour did not progress, ergot was administered; and when the uterus in three hours had given no response, the child, in an extremely decomposed state, was removed by the blunt hook. The rotten funis gave way in an attempt to remove the placenta; and several endeavours to introduce the hand into the uterus, with the same object, entirely failed. Until the 21st, as the woman seemed comfortable, no further steps were taken; but, as she then complained of tenderness on pressure over the abdomen, and as the bowels had not acted since her delivery, a turpentine enema was administered, with the result, in three hours, of emptying the rectum and expelling the