

stated that a regular account of the cases which occurred from 1st January, 1823, to 31st December, 1836, and of the out patients of the same institution, from September 30th, 1825, to 31st December, 1836, has been kept, and an abstract of the result, in what relates to laborious labours, has been added. Nobody but Dr. Collins would venture to allege, that this is concealment; and when I add, that since the institution of the hospital, an annual printed account of the number of patients delivered, and of the very items of expenditure, has been distributed among the subscribers; and that upon an average, nearly one hundred pupils annually attend the hospital, at the expence of £1 3s. for six months' attendance, it would require even more dexterity than Dr. Collins gives me credit for, to conceal the affairs of the Edinburgh General Lying-in Hospital.

Having thus pointed out, that by means of interpolations and substitution of words, and by garbled quotations of sentences and paragraphs, Dr. Collins has contrived to render plausible his various misstatements and misrepresentations of my opinions and practice, I have only to add, that it is impossible for me ever to have any future communication with that individual.

I have the honour to remain, Mr. Editor,

Your obedient, humble Servant,

JAMES HAMILTON.

ART. IX.—*Observations on Fever.* By ROBERT LAW, A.M.,
M.D., Physician in Ordinary to Sir Patrick Dunn's Hospital

ALTHOUGH there is no disease that has afforded more ample opportunity for the investigation of its nature, and of all circumstances connected with it, than fever; from the frequency of its occurrence both as an epidemic, and in isolated cases; from its sparing neither age nor sex; from being confined to no

particular climate or locality ; and from its ever having engrossed a large share of the attention both of the practical physician and of the pathologist : we still find there is no disease upon whose nature more obscurity prevails ; none in connexion with which there exist more disputable points, and these points most intimately and essentially affecting the very nature of the disease. Among the many causes which contribute to involve the nature of fever in doubt and uncertainty, we would advert to a few which appear to us especially to conduce to it. 1st. The imperfect state of both our anatomical and physiological knowledge of that portion of the animal economy, in the derangement of whose functions the earliest phenomena of fever exhibit themselves, we allude to the nervous system. From our incompetency to appreciate the first effects of the morbid principle of fever upon this system, and analogy seeming to point to another system with whose functions we are better acquainted, viz. the absorbent system, as the channel through which the matter of fever entered the body, a theory was framed to meet the state of our knowledge, attributing fever to the passage of a miasma or noxious subtile fluid into the economy through the absorbent vessels. This theory was countenanced by the fact, that when one exposes himself to the contagion of fever fasting, he is more likely to contract the disease than when in an opposite state. It was inferred from this, that this greater susceptibility arose from increased energy of the absorbent system ; that the vessels of this system, being refused their natural and wholesome nutriment, became as it were exasperated, and swallowed whatever came in their way, and thus took in this miasma or materies morbi, and conveyed it into the system. This is the most generally received theory of fever, and this is the explanation that most physicians would give of their practice of not exposing themselves to contagious fever when the stomach is empty. We quite agree in the wisdom of the precaution of satisfying the absorbents, but deny that they are more the channels through which the morbid

matter enters the system in this instance than they are in other cases where there is no reason to suppose either that they are in an unusual state of activity ; nor if they were, can we discover any contagion to serve as a *materies morbi* for them to exercise themselves upon. These are cases in which a strong moral impression acts as a direct and immediate cause in the production of a fever similar in all respects to one from contagion ; or when the body having been weakened either by anxiety, watching, or by intemperance, and then been exposed to fever, and become affected. This susceptibility in these instances is of the same nature as that resulting from fasting, and is the effect of the debility of the system, and not of the activity of the absorbents. The second cause to which we would attribute the obscurity connected with fever, is the little opportunity that a medical man has, in general, of seeing the disease in its earliest or nascent stage, his assistance being seldom sought for till the first symptoms have lost their simplicity, from being modified by, and mixed up with others which succeed, but which are no otherwise connected with the primitive symptoms, than as the several parts thus secondarily affected stand in sympathetic relation with those upon which the morbid impression is first made. Thus will it not unfrequently happen, that those secondary symptoms being much more striking and prominent in their character, will claim to themselves an exclusive attention, throwing, as it were, into the shade the primary ones, and causing them to be almost, if not altogether, overlooked. Thus do we find that all the symptoms of fever antecedent to the increased frequency of pulse and heat of skin, are taken no account of in the history of the disease ; while this latter symptom has been selected as so essential as to be the one to give a name to it, although in many of the most striking cases this feature is altogether absent ; and, at all events, in most does not come on until other, though perhaps less striking symptoms, have already existed. This obscuring antecedent by subsequent symptoms, is particularly to be observed when the inflammation of the intes-

tinal mucous glands complicates the original symptoms of fever. These secondary symptoms will, in fact, assume so serious a character, as to constitute the principal danger. The frequency of this complication has led to the opinion that it was the essence of fever ; whereas, we are confident, from repeated examinations of the bodies of individuals who have died of the disease in an early stage of it and exhibited no affection of these glands ; and of others, whose early symptoms differed only in being less intense, and who having passed this early stage, have fallen victims to the complication ; that the complication is accidental and not essential.

An intelligent writer on fever, in the warmth of his opposition to the doctrine of essential fever, or of fever independent of sensible organic lesion, while he is obliged to admit, that in the bodies of some who die of fever, no organic lesion can be detected, explains this unfavourable circumstance to his theory by *supposing* that had the subjects of these cases lived longer, the requisite lesion would have taken place ; that death was too expeditious for it ; in other words, that the disease not only preceded its cause, but actually reached its fatal termination before the tardy cause made its appearance. Into what strange inconsistencies, and even absurdities, will the support of our pet theories not unfrequently betray us !

In asserting the very frequent disease of the intestinal glands to be an accidental complication, and not essential to fever, we feel all the importance of the subject in a practical point of view ; nor would we dare to advance it, did we not feel ourselves warranted to make the assertion from the result not only of *post mortem* examinations, but from a close watching of symptoms as they developed themselves, manifestly exhibiting by cognizable signs the affection of the glands, and from this period stamping the disease with features which it hitherto had not.

Our city is now, and has been for some months past, more free from fever, than it has been for nearly three years ; typhoid

fever having prevailed the greater part of that time, with varying intensity, and under various modifications. Among these modifications we had the opportunity of abundantly witnessing that connected with disease of the intestinal glands ; this complication constituting the striking feature of the epidemic for a time. It is from the results of our experience of the epidemic when presenting this character, that we question its being essential, finding it, as we before stated, not present in the bodies of those who were quickly carried off by the disease ; nor discovering in an early stage of the disease, those symptoms which afterwards exhibited themselves, indicating the complication. These varying phases of fever, the result of accidental complication, have contributed their share to the difficulty of fixing the nature of fever, causing partial and secondary affections to be considered as primary and fundamental modes of derangement.

We shall proceed to detail some cases of fever, which seem to us calculated to throw some light upon the mode in which the first morbid impression is made upon the system in the production of the disease ; and see how far these cases tend to confirm the opinion that fever is the result of a miasma conveyed into the system by the absorbents : or if it be not, at least in some cases, the effect of a moral impression acting upon the nervous system, and exhibiting itself in symptoms indicating a derangement of the functions of this system.

CASE I.—John Gray, aged 30, grocer, admitted into hospital September 29th, 1836. A week since he was seized with a rigor, which he says, almost immediately followed upon what he calls a “turn,” which he felt at hearing a woman scold her child for visiting a person ill in fever. Shortly afterwards he felt soreness in his head, eyes, and neck.

Present phenomena. Pulse 108, soft ; dry burning heat of skin ; elevated red spots on chest and abdomen. Face flushed ; eyes suffused and watering ; lips red. Tongue dry, and red at point and centre ; respiration hurried, and sighing. Thirst not

urgent; abdomen soft, not sore on pressure; expression peculiarly anxious.

℞ Mist. Camphoræ, ℥iv.
 Aquæ Acetat. Ammoniacæ, ℥ii.
 Spirit. Ammon. Aromatic. ℥i.
 M. St. ℥i. 3tiis horis.

℞ Camphoræ gr. ii.
 Pulv. Jacobi gr. i.
 Ft. Pilula ter die sumenda.

Body to be sponged with tepid vinegar and water.

30th. Pulse 108, wiry. Spots on chest and abdomen more developed. Belly tympanitic; tenderness in ilio-cæcal region; tongue red, dry, and florid at point; bowels not free; urine scanty. Had disturbed muttering sleep; has every mark of extreme nervousness.

Enema Terebinthinæ statim. Hirudines duodecem regioni Iliocæcali. Cataplasma Abdomini postea. Fove crura. Adde Mist. heri prescriptæ Aceti opii gutt. xx. Rept. Pil. Camphoræ et Pulv. Jacobi.

October 1st. Pulse 120, soft, weak; skin densely covered with elevated purple petechiæ, resembling a papular eruption; tongue dry, reddish-brown, glazed in centre. Abdomen tympanitic; countenance less anxious; a copious discharge of urine followed; friction of the abdomen with turpentine.

Repetr. Medicamenta.

2nd. Subdelirium through the night; pulse 108, feeble; is rather sleepy and drowsy; countenance tranquil and not anxious; bowels free; urine copious.

Repetr. Medicamenta. Lotio frigida fronti. Fomentationes Terebinthinatæ abdomini et cruribus.

3rd. Chest and abdomen thickly covered with dark purple petechiæ; face flushed, eyes suffused; tongue dry, rough, and brown in centre. He answers questions consistently, but very

slowly ; abdomen tympanitic, but not sore when pressed ; copious and involuntary discharge of urine. Bowels not free ; had delirium through the night.

Hirudines sex pone singulas aures. Lotio frigida fronti. Fomentationes Terebinthinatæ abdomini et cruribus. Enema Terebinthinatum.

4th. Face much less flushed ; eyes less suffused ; answers much more immediately ; pulse 114, of tolerable firmness ; belly tympanitic ; petechiæ become more of a brown colour ; tongue dry, rough, and of a whitish brown colour. He had no delirium through the night.

5th. He passed a considerable quantity of urine under him during the night, and this morning ; still hypogastrium very full. Catheter introduced, drew off nearly two quarts of dark, ammoniacal urine ; pulse 96, full ; skin soft and moist ; belly, which was tympanitic before introduction of catheter, now flaccid and pliable ; countenance composed and tranquil.

Mist. Cardiac.

6th. Pulse 96 ; skin soft and moist ; considerable tumefaction and fulness of hypogastrium, although a large quantity of urine has escaped from him in the bed. Catheter has again drawn off not less than two quarts of the same character of dark-coloured urine. Tongue dry and rough.

Haustus effervescens c. Spiritus Ammon. Aromatic. gtts. xx, 3tiis horis.

8th. Has had no involuntary discharge of urine since last report. Required the instrument again to be introduced, which drew off three pints of water. All febrile symptoms almost gone. The bladder soon recovered its power ; and in a very few days from hence we were able to pronounce him convalescent.

The preceding case presents us with some interesting considerations. In the first place, it exhibits to us strikingly the

mysterious influence of a moral impression, not only in predisposing to, but in actually producing disease. The young person, who had been the subject of his mother's rebuke for visiting the individual in fever, did not himself contract the disease, nor was Gray exposed to fever from any other source, as far as we could learn. Another consideration suggested by the case is the necessity of closely attending to the state of the bladder in fever, and not to allow ourselves to be thrown off our guard by even a full discharge of urine, as we here see how compatible it is with a very loaded state of the organ. The involuntary discharge of the urine, under such circumstances, may be, (as we doubt not was the case here,) not the result of relaxation of the sphincter, nor of that mental absorption and preoccupation, which so often in fever allows the calls of nature to pass unnoticed; but the atony and partial paralysis, and consequent loss of control of the organ over its contents from its prolonged distention.

CASE II.—Eliza Jordan, aged 26; unmarried; of a nervous temperament; admitted into hospital March 28, 1836. She had been in perfect health a week since, when on missing a piece of linen which had been committed to her care, to make shirts, from the apprehension that her honesty would be called in question, she was seized with a violent rigor and sickness, which confined her to bed ever since. Present symptoms:—pulse 150, small; skin hot and moist; tongue covered on upper surface with whitish yellow fur, red at point and edges; respiration hurried and sighing; complete loss of sleep; she says she has not slept since commencement of her illness; bowels obstinately torpid. Has a disposition to weep; has a distressing choking sensation in the throat; complains of tired, fatigued feel; no headach, but feels her head light; thirst.

Enema Terebinthinæ statim.

R Mist. Cardiacæ ℥i. 3tiis horis.

Hausus e Liquoris Opii Sedativi gtts. xv. h. s.

30th. Skin, especially on chest and back, thickly covered with livid purple petechiæ ; gums soft, spongy, and disposed to bleed ; pulse 132, soft ; tongue large, flabby, and not much coated. She slept well last night, and even still seems under the influence of opium.

℞ Mist. Camphoræ ʒ vi.

Spirit. Ammon. Aromatic. ʒ i.

M. Sumat. ʒ i. 3tiis horis.

31st. Pulse 150, small ; petechial eruption more general over the body ; face flushed ; tongue covered with yellowish fur ; she moans continually ; respiration laboured and sighing ; thirst very urgent ; slept none last night ; urine of a dark brown colour.

Mist. Cardiac.

Aqua c. Acid. Nitro Muriatico diluta, pro potu.

Haustus e Liquoris Opii Sedativi gtts. xii. h. s.

April 1. Pungent heat of skin ; face very much flushed ; pulse extremely small, scarcely can be counted ; tongue dry and brown in centre, red at point and edges ; abdomen very tympanitic ; epigastrium sore when pressed ; dorsal decubitus, with legs drawn up ; insatiable thirst ; skin very much mottled ; was very restless during the night, and could with difficulty be kept in bed ; headach.

Hirudines duodecem epigastrio. Cataplasma amplum abdomini postea. Lotio frigida fronti. Foveantur crura. Vini ʒ viii. Ene-
ma Terebinthinæ.

2nd. Pulse 144, very small ; skin less hot, and less mottled ; moans continually ; tongue dry, brown, and rough ; bowels obstinately torpid. Is quite conscious.

℞ Olii Ricini.

Olei Terebinthinæ.

Aqua Ment. Sing. ʒ ss.

Fiat haustus statim sumendus. Repetr. Vinum.

3rd. Pulse 120, stronger ; bowels free ; is heavy and stupid, but perfectly coherent.

Vesicat. Nuchæ. Foveantur crura.

4th. Pulse 120, small. Is still in a dead, heavy state ; involuntary and copious discharge of urine ; she moans incessantly ; deglutition difficult ; abdomen tympanitic, and sore on pressure ; bowels confined.

Vesicat. vertici. Enema Terebinthinæ. Foveatur abdomen. Wine whey.

5th. Pulse 126, stronger ; face flushed ; eyes suffused ; abdomen not sore when pressed.

White wine whey.

6th. Sixteenth day of fever. Pulse 114, small, but distinct ; duskiness of skin much less ; face less flushed ; countenance improved ; abdomen flaccid ; tongue still dry, and brown at point and centre, moist at edges. Expresses a wish for flummery.

8th. Pulse 96 ; tongue still dry, and brown ; much improved otherwise. Menstrual discharge present.

10th. She continues to improve.

12th. Febrile symptoms all gone. Convalescence was complete, but slow. The mind took at least as much time to recover its energy as the body.

The direct and immediate effect of a moral cause in the production of fever, is no less apparent in this than in the preceding case. The nervous character of the fever is, however, more strongly marked in this than in the other. We find it commencing with rigor, which so commonly attends injurious impressions on the nervous system, such as a shock, fright, &c. The other symptoms also equally indicated how deeply the nervous system was involved. The soft, spongy condition of the gums, with the disposition to bleed, connected with the exten-

sive livid petechial efflorescence, gave the case a character not very unlike purpura hæmorrhagica, or scurvy; and tended to confirm us in an opinion to which we had been led by other similar cases as to the rationale of these dark-purple petechiæ, which we conceive we have observed most frequently, and most markedly, when the nervous system is most deeply engaged. We know the effect of lightning, and other causes which destroy life by a strong impression on the nervous system, such as a blow on the stomach, is to deprive the blood of its power of coagulation, and, as it were, to break it up and dissolve it. So, in these fevers, the blood becomes attenuated by its loss of vitality, and passes into the capillaries, whose diminished tone, from the general debility, passively contributes to the same effect. How often do we meet passive hæmorrhage attacking individuals who have suffered from depressing moral causes?

CASE III.—Mary Keville, aged 27; married; admitted into hospital May the 3rd. She complains of a most distressing pain in the epigastrium and left hypocondrium. Pulse 126, soft and feeble; skin hot and dusky; tongue covered with a drab-coloured fur; abdomen soft, not painful on pressure. She has had no sleep for several nights. Great prostration of strength and depression of spirits. The account she gives of her illness is, that she came in perfect health to see her husband who was ill of fever in the hospital; she had not been long in the ward, when another patient, in a state of delirium, jumped out of bed and ran towards her; as she attempted to escape from the ward, she fell, and struck her left side against the door; she immediately felt sick and unable to walk. Soon afterwards she was seized with the pain, or what she describes as a burning sensation in the epigastrium and hypocondrium, which from the time of its first coming on a week ago, till now, has never left her. All this time she has been confined to bed.

Adhibeantur Hirudines duodecem regioni dolenti. Haustus, e Liquoris Opii Sedativi gutts. quindecim, et Mist. Camphoræ: uncia, horâ somni sumendus.

4th. The pain has completely yielded to the leeches. She has had some hours of refreshing sleep. Tongue covered with greenish-yellow fur. Pulse 132, extremely feeble and compressible.

Three ounces of wine.

5th. Complains of heat of stomach. Pulse 138, small and thready. Pressure excites no pain in any part of the abdomen, except in the ilio-cæcal region; and there it is very inconsiderable. No tympanitis. Skin generally spotted. She moans continually.

Wine, three ounces. Cataplasma abdomini.

8th. No amendment in symptoms since the last report. Pulse 138, extremely feeble. Tongue, lips, and teeth, covered with a blackish incrustation; great restlessness; abdomen not tympanitic; skin spotted, rough, and furfuraceous; thirst very urgent.

Wine eight ounces. Mist. Cardiac.

9th. Pulse very feeble. Hands and nose cold. Tympanitis in a slight degree; surface thickly covered with dark petechiæ; dense fuliginous incrustation of tongue, lips, and teeth; face flushed; eyes suffused. She had no rest through the night.

Twelve ounces of wine.

10th. Pulse 138, a degree stronger. She has lost the almost cadaveric coldness which she had yesterday. Abdomen more tympanitic; face flushed; is quite coherent.

Eight ounces of wine. Enema Terebinthinæ.

11th. Pulse 108, small and thready. Hands and tip of nose have again become quite cold; prostration extreme; consciousness perfect.

Twelve ounces of wine, or more if necessary.

12th. Pulse 102, with some degree of strength. Tempera-

ture of hands and nose natural. Cuticle desquamating. Debility very great.

Repeat the wine. Beef tea.

13th. Face flushed ; tongue dry and incrustated.

15th. Pulse 108, much firmer. Tongue continues dry. She is in every other respect much improved.

Four ounces of wine. Beef tea.

16th. Pulse 90. Although the tongue continues coated, her appetite has returned.

17th. Tongue quite clean. The skin of almost the entire body has desquamated, as if she had had erysipelas or scarlatina.

22nd. Is quite convalescent. Her strength returned very slowly.

How are we to explain the mode of this individual's attack of fever. If we are to suppose it was contracted from exposure to contagion, we would avail ourselves of the argument of the toxicologist, who reasons that from the very short period of time in which some poisons exhibit themselves in the system, these poisons must affect the system through the medium of the nerves rather than through the circuitous route of the circulation. She was satisfied that her inability to walk, and immediate sickness, were not the effect of her falling against the door, but of the fright. Nor can we believe that the fever was symptomatic of an injury inflicted by the fall, as we cannot conceive that any local injury can give rise to a fever resembling petechial typhus fever in all its symptoms. Although the type of fever attending injury may be very low and asthenic, we believe petechiæ will never be present in such asthenic symptomatic fevers.

CASE IV. — Farrington, aged 36 ; married ; nurse of the male chronic wards in Sir Patrick Dunn's Hospital, admitted into fever ward, October 12, 1836. She had been ill for several days before she came under our care ; she had tried to fight against her illness, but was at length obliged to give way. The history of her illness was this : A man was brought into the

hospital affected with delirium tremens, so violent that he broke the porter's arm, when he attempted to put the strait-waistcoat upon him. He was at length secured, and placed in a separate apartment in the lower part of the hospital. His feat of violence had rendered him an object of curiosity; and the nurse must needs see the wild man. When she saw him he had such an expression of savage wildness, that she was quite terrified; she could scarcely stand; felt herself covered with cold perspiration, and was quite unable to walk up stairs. Her stomach then became sick, and she was seized with violent headach. Leeches applied to temples relieved the head.

She had been five days confined to bed when she was removed to our fever ward, and presented the following symptoms. Pulse 108, small. Face flushed; eyes suffused; tongue moist at point and edges, red and dry in centre. She complains much of dryness of tongue and throat. Skin dusky, hot and dry; abdomen tympanitic, not tender when pressed. Muttering delirium through sleep. No intolerance of light.

Abradr. Capillitium. Lotio frigida fronti. Foveantur crura.

℞ Mist. Camphoræ ʒ iv.

Aqua Acetatis Ammonia ʒ iii.

Spirit Ammon. Aromatic. ʒ i.

Syrupi Croci. ʒ i.

Misce. Sumat Cochlear. duo ampla tertiis horis:

22nd. She seems much better. Her countenance indicates much less anxiety; face less flushed; eyes less suffused; has now scarcely any headach. She had quiet, tranquil sleep through the night.

24th. Pulse 108, soft. Skin cooler and less dusky. She complains of slight headach, and had some delirium through the night.

Lotio frigida fronti. Foveantur crura. Adde Mist. antea prescriptæ Aceti Opii gutts. viginti.

25th. Was quite delirious through the night. Pulse 96,

weak and compressible. Face flushed ; eyes heavy ; skin rather cooler ; tongue moist and covered with whitish slimy mucus. She has had a nervous anxiety and great depression of spirits since the commencement of her illness.

Hirudines quatuor pone singulas aures. Lotio frigida frontis: Fomentationes Terebinthinatæ cruribus. Reprtr. Mist.

Two days from this she improved so much that we were soon able to pronounce her convalescent.

Although the subject of this case, being an inmate of the hospital, was always as much exposed to the infection of fever as she was at the time of her seizure, it was only now when she was frightened that she became affected. She had been in perfect health before the attack ; nor was the case of delirium tremens, one of fever in which the delirium tremens was accidental, but one of pure delirium tremens, and therefore, not one to communicate infection. A degree of nervous excitement marked her illness, through its entire course.

CASE V.—Mrs. Dyas, aged 26, admitted into hospital 20th May, 1836, presenting the following symptoms : pulse 138, full and firm ; skin universally covered with an efflorescence scarcely to be distinguished from measles ; lips and mucous membrane of mouth of a deep red colour ; a peculiar brilliancy of eye ; tongue clean and red ; abdomen soft, not tender ; thirst moderate. She states that she has been ill for six days : that she had been in close attendance on her brother, who was ill of fever, and had not spoken for two days, when he shouted, and gave her a sudden start ; she immediately felt a pain in her back and head, with sickness of stomach and general weakness.

Hauftus effervescens c. Spiritû Ammonię Aromatic. Pulv. Jacobi veri gr. duo. quartis horis.

21st. Skin more thickly marked, and efflorescence of a more crimson hue. Complains of fulness in her head, or rather corresponding to the frontal sinuses. Diarrhœa.

Pulv. Doveri gr. quatuor, quartis horis.

23rd. Pulse 132. She complains of distressing tinnitus aurium. Bowels still relaxed; efflorescence of a darker colour; face flushed; eyes watery; lips red; tongue clean.

24th. Skin does not exhibit the same congested appearance; a few dark, circumscribed spots on chest and abdomen. She has never felt very ill at any period of her sickness. On the 28th, we marked her convalescent.

Although the subject of the preceding case was under circumstances of exposure to the matter of infection, so that it could not be a cause of wonder her contracting the disease; still the mode of seizure was sufficiently remarkable, and of such a nature as to seem to warrant its being placed along with the cases which it so closely resembled in the share which a moral impression had in its production. It is not, in general, when one is in actual attendance on a sick friend in a contagious disease, that illness is contracted: susceptibility seems to be suspended till the mind is somewhat relieved of its anxiety, and then, when the improved condition of our friend ceases so deeply to engage our sympathies, the danger to ourselves begins.

CASE VI.—Eliza Brereton, aged 19; unmarried. Admitted into hospital, March 5th. She was unable to give an account of herself. Her mother states that eleven days since she received brutal treatment from a person in whose employment she was; that she was immediately seized with violent headach, and complete inability to walk home. The next day her face broke out in large blisters, which soon disappeared. She then was affected with violent pain of the head and throbbing of the temples, for which she applied leeches, but without the least relief. She complains at present that she never closes her eyes in sleep. Pulse 140, full and corded; respiration very hurried and panting; expression very anxious; tongue loaded with yellowish fur. She complains of a hammering sensation in her head which distresses her greatly. Prostration of strength and depression of spirits extreme; thirst very urgent; face and surface generally exhibit a dead pale, exanguious,

hue, like one who had sustained a profuse hemorrhage. She was so deaf that we found it no easy matter to procure answers to our questions.

* Mist. Cardiac. Vini ζ iii. Fove crura. Haust e. Liquoris Opii Sedativi gtts. xv. h. s.

6th. Pulse 140, wiry; she complains much of noise in her head; had some broken sleep; expression very anxious; tongue cleaner, and more moist.

Repetantur Medicamenta.

7th. Pulse weaker and less wiry; had some quiet sleep during the night; she moans continually; abdomen not tympanic, nor sore on pressure. Her symptoms underwent no change till the 10th, when the respiration became more laboured, the distressing sensation in her head more urgent, and her symptoms generally indicated approaching dissolution, which took place next day. Examination of the body exhibited no other morbid appearance, than a very scanty serous effusion on the surface of the brain and into the ventricles, with, perhaps, more red dots than usual on making a horizontal section of the organ. The heart was soft and flabby in its structure.

How are we to designate the preceding case? Neither its symptoms during life, nor the appearances after death, entitle it to be regarded as fever. We would adduce it as an illustration of the prompt influence of moral causes, stifling, as it were, the principle of life, without producing, at least, any sensible change in organization. Many of the symptoms reminded us of the effects of a profuse hemorrhage, which exhibit themselves especially in the derangement of the nervous system. The case derives additional interest from its connexion with one which we are about to detail.

* Rk Mist. Camphor. ζ vii. Carbonat. Ammoniae \mathfrak{g} ii. Liquor. Hoffman. ζ ii. Syrupi Croci. ζ vi. M.

CASE VII.—Mary Birmingham, a strong healthy person both in mind and body, nurse in the fever ward, describes herself, as becoming suddenly ill, when in raising the subject of the preceding case in bed, she felt herself, as she says, grasped by the cold, clammy hand of death. She had been quite well before, nor was there much fever, or of a bad type in her ward. On the third day of her illness, the body, especially the chest and abdomen, were covered with a diffused, measly efflorescence; her countenance exhibited a stupid, intoxicated expression; depression of spirits and prostration of strength were extreme; tongue large and flabby, and covered with yellowish, slimy mucus. She complained of a most disagreeable taste in her mouth. Leeches applied to the nape of the neck relieved a most distressing pain in the back of her head. She presented the following symptoms on May 18th, (the twelfth day of her illness,) pulse 108, full, soft, and compressible petechiæ fading; occasional irregular action of the muscles of the left hand and arm; tongue covered with whitish yellow fur; no headach; no abdominal tenderness; great depression of spirits, and prostration of strength.

21st. Pulse 90, soft, and very compressible; she complains of soreness when epigastrium is pressed; disagreeable fetor of breath; face flushed; subsultus tendinum, and irregular action of hands; prostration extreme.

Arrow root with a small quantity of Brandy.

R Moschi 3 ss.

Aquæ Menthæ Piperitid. 3 v.

Liquor. Hoffman. 3 ii.

Syrupi Croci 3 vi.

Misce. St. 3 i. tertiis horis.

23rd. Pulse stronger; no subsultus; expresses a desire to eat something.

Beef tea. Four ounces of wine.

25th. Very much improved in all respects.

She was soon declared convalescent, but was a long time recovering her strength.

What inference are we to draw from the preceding case? The febrile seizure followed almost immediately after she had been employed about Brereton. At the time there was not a bad fever in her wards, nor was she aware of any thing that could have rendered her more susceptible of febrile infection, (had she been exposed to it,) than at other times. We can only regard the mode of attack, as of the same nature with others, where the absence of contagion, as the *materies morbi*, was more unequivocal; since the suddenness of the seizure, and the nature and character of the subsequent symptoms established an analogy between them and it.

We shall enter into no elaborate comment on the preceding cases. The object with which we have recorded them, is to try to prove from the nature of the cause of fever and the mode of its impression upon the system, as well as from the first and earliest symptoms, that it is the nervous system that is mainly interested. The cause which seemed to operate in all the cases which we have adduced was a moral cause. And, although in some of the cases it would have been difficult to have proved the absence of infection, where it might have been supposed only to have acted as a predisposing cause; yet in others no infection could be suspected, and therefore we must regard it as the direct and immediate cause; and as there was no difference in the symptoms of the cases when the infection was more questionable and of the others, it is reasonable to suppose that the mode of the impression was the same in both. We observed the same nervous character to pervade both. As in those cases where there was no reason to suspect infection, there was no palpable *materies morbi* for the absorbents to exercise themselves upon, and in those where infection might possibly have operated, (although the circumstances rendered it very improbable,) neither the suddenness of the effects after the exposure, nor the nature of these effects, constituted any analogy between them and

cases in which the principle of disease acts confessedly upon the system through the absorbents, we see sufficient reason to question these vessels being the channels through which, whatever it be that causes fever, produces its injurious effects upon the system.

Indeed we might say, that even in cases where there was most reason to suspect absorption, when a person having exposed himself to contagion, fasting, and then contracted the disease; even here, the symptoms exhibited by the disease, so resemble those, where there is no possibility of suspecting infection, that we cannot but believe, that the mode of impression is the same in both cases, and, that as it is not absorption in the one case, neither is it in the other.

As to the precise mode in which the impression is made upon the nervous system in fever we know too little, either of the morbid principle or of the system upon which the impression is made, even to attempt a solution. We can only say, that the first cognizable effects are observed in the nervous system. How frequently is rigor (which may be regarded as a nervous symptom, whether occurring as an irregularity of the calorific function, or as the effects of a moral impression,) the first announcement of fever? Have we not the organs of sense almost immediately responding to the morbid impression; and how soon follow the complaint of the pain in the back, and the mis-called pains in the bones, but really of the nerves proceeding from the spine and distributed to the different parts of the body? Then have we in their order the derangement of the functions of the nerves which preside over organic life, viz.:—deranged appetite, derangement of the secretions, &c.; add to these the more or less complete prostration of strength and depression of spirits, the almost constant accompaniment of fever. We would now ask, what system in the economy, or what part of organization is there, whose affection is enough to account for all these? We unhesitatingly reply, none but the nervous system.