fair extension and adjustment of the existing system," and the first recommendation he makes is as follows:—

"*A limited number of the chronic lunatics who now occupy beds in the public asylums may be placed as boarders, either singly or in small licensed houses of four* (*as in Scotland*), *in their own villages.*"

In 1865, therefore, he recommends the adoption of that which in 1867 he calls a "retrograde step in the care and treatment of the insane." In 1865 he recommends the introduction into England of what, in 1867, he calls "the most objectionable form of lay speculation in lunacy." In 1865 he holds up Scotland for imitation, and in 1867 he says he cannot cite the example of Scotland in this matter as even worthy of consideration. If the advice given by Dr. Robertson in 1865 had been promptly acted on, and the law had been changed as he proposed, I do not see how he could have written one part of this address.

Clinical Cases illustrative of the value of the Thermometer as a means of Diagnosis in Diseases of the Nervous System. By F. W. Gibson, M.D. Lond., Resident Medical Officer, St. Pancras Infirmary; late Assistant Medical Officer, Criminal Lunatic Asylum, Broadmoor.

Case 1.—S. E—, female. Admitted Jan. 22, 1866. Tried for wounding, with intent to murder, Dec., 1865. Found insane. She lived in a cellar with her husband and child. From the evidence given at the trial and from her own account, it appears that she wounded her child slightly with a razor in order to frighten her husband, who had treated her with great cruelty, into better behaviour. After she had been taken into custody it was found that "her mind was much shaken, and that she was the subject of delusions."

State on admission.—Is in fair health; suffers occasionally from headache; no evidence of delusions; is quiet, and willing to work.

April 13th.—Behaving well; employed in laundry.

28th.—Complains of pain in the right arm, and of headache.

29th.—Has been in bed all day, suffering from headache, pain in the right arm, and from malaise; at eight o'clock was sick, vomited matter, greenish; afterwards she frothed at the mouth, and became faint and cold. Seen by me at ten o'clock. She was found

* 'Journal of Mental Science,' No. lii, pp. 471—491.

to be "lying on back in bed, moaning inarticulately, face pale, skin cold to touch, perspiring. Pulse 60, feeble; respiration 20, not stertorous; heart's action irregular; pupils equal, contracted, sluggish. When spoken to she can be partially roused, but gives no intelligible answers to questions; swallows with difficulty a little brandy; when the skin of her feet is pinched she draws up her legs, and complains in a semi-articulate manner. Does not put out her tongue when asked. 2 a.m.—Has been sick five or six times since last report; skin warm; pulse 80, fuller, and more regular; slight twitches of right arm.

30th.—11.45 a.m.—Pulse 120; resp. 40; temp. 101$\frac{1}{5}$°. She is more unconscious. Pupils equal, contracted; have been dilated and contracted alternately. Paralysis of left side of face and of left arm, accompanied, in the latter case, by rigidity of the muscles. Respiration stertorous, but not markedly; no paralysis of muscles of respiration, nor seemingly of any others than those named above. 4 p.m.—Pulse 100; resp. 41; temp. 100°. No murmur audible in cardiac region; large-sized râles all over left lung anteriorly. 6 p.m.—Pulse 120; resp. 32; temp. 102°. Passed water voluntarily at 2 p.m.

May 1st.—10.55 a.m.—Pulse 116; resp. 60; temp. 102°. Has swallowed beef-tea and brandy during the night; moves both arms slightly; sensibility in left leg minus; respiration stertorous; no convulsions. 4.55 p.m.—Pulse 130; resp. 64; temp. 102$\frac{1}{5}$°.

2nd.—Died comatose at 9.45 a.m.

Autopsy, thirty hours after death.—Temp. of air, 40°, moist; position of body since death, on back. *Calvaria,* nothing notable. *Dura mater,* no adhesions to calvaria; small, pale, non-adherent clot in superior longitudinal sinus. *Pia mater* strips easily from convolutions. *Gray matter* of convolutions of cerebrum rather dark. No atrophy. *White matter* of hemispheres, ventricles, central ganglia, pons, and medulla, healthy. *Cerebellum,* right crus and flocculus much softened throughout; colour not appreciably changed; the remainder of cerebellum healthy. *Spinal cord,* whole thickness in mid-dorsal region much softened; just above lumbar enlargement softening limited to white matter; the rest of cord healthy.

Microscopical appearance of softened parts.—Nerve-tubes broken down; large cells containing numerous granules, and granular state of nerve-cells; nothing abnormal discovered in vessels of brain.

Organs of respiration and circulation.—Nothing notable in former; great contraction of tricuspid and mitral valves of heart from atheromatous deposit; aorta healthy.

Organs of digestion.—Healthy.

Genito-urinary organs.—Right supra-renal capsule converted into

a cyst; kidneys granular and shrunken; bladder, uterus, and ovaries, healthy.

The case of S. E— presents many very interesting features.

1. Softening of the crus cerebelli, unaccompanied by any lesion of the remainder of the encephalon, is, I believe, very rare. I cannot find any record of a similar example in the books to which I have access at present. Notable is the absence of any of the phenomena produced by the section of the crus in the well-known experiments of Magendie, Longet and Schiff, and Muller, on pigeons.

The cerebellum most persistently and perversely offers to the physiologist pathological facts strangely adverse to his favorite theories.

2. Notable likewise is the considerable power of motion in the lower limbs, in spite of the large amount of lesion in the spinal cord. That a woman whose cord is found after death to be softened throughout should be able, a few hours before that event, voluntarily to draw up her legs in the bed, is unusual, but can be accounted for; most probably a small strand of nervous fibres remained unbroken until a short time before death, and that this sufficed to carry a feeble volitional stimulus.

The combination of tricuspid constriction, itself no common disorder, with mitral constriction, is of sufficient rarity to merit a passing notice, even in the pages of a psychological journal.

3. The difficulty in the diagnosis between cerebral hæmorrhage and acute cerebral softening is so great, that many have declared that it is in some cases impossible. I should not be justified in stating that the problem can always be solved by means of the thermometer; but I may venture, I think, to say that it is a valuable means to that end, for in all cases of the former disorder where I have made thermometric observations I have found elevation, in those of the latter no elevation, of temperature.

I am glad to be able to add that Dr. Ringer, a far more experienced observer than I am, informs me that he has arrived at a similar conclusion as to the non-elevation of temperature in cases of cerebral hæmorrhage. Absence of elevation of temperature above the normal standard would be predicted from *à priori* reasoning in such cases. If inflammation in the neighbourhood of a hæmorrhagic nidus ensue, the case becomes virtually one of abscess of the brain, and, of course, like abscesses in other parts of the body, is accompanied by elevation of temperature above the normal standard.*

Case 2.—S. S—, male, æt. 55. Admitted Nov., 1864.

¶ Since the MS. was sent to press I have seen a case in which the temperature was 101°, which was proved by post mortem examination to be one of hæmorrhage into the arachnoid and pons, without any complication.

History.—Tried at Chester, in 1854, for arson. Found insane. Sent to Chester Asylum, and thence to Broadmoor.

State on admission.—Dulness and feeble inspiration in left clavicular and infra-clavicular regions; no abnormal cardiac signs; no hemiplegia, but speech rather indistinct.

Mental state.—Memory defective; answers simple questions correctly, but with hesitation. Says that the farmer whose stacks he "fired" was always "making game of him," and that he fired them to spite him. Expression of face that of a minus condition of intelligence. Gives no evidence of delusion.

His state remained much as above until August 6th, 1867, at which date the following notes were taken:

At 4 o'clock in the afternoon of that day he had an attack of vomiting, and felt faint. He said that some one had knocked his legs from under him. He was sent to bed, out of which he fell, striking his head, and inflicting a slight scalp wound. 8 p.m.—Pulse 64; resp. 20; temp. 98°. Semi-conscious; paralysis of muscles on right side of face; of right arm and leg; none of muscles of chest, even on deep inspiration; pupils equal; no paralysis of muscles of palate; slight paralysis of muscles of jaw on right side; tongue points to right side when protruded; no rigidity of muscles on right side, nor loss of sensation (consciousness had returned when test was applied); no twitches; no convulsions.

August 7th, a.m.—Pulse 60; resp. 16; temp. 98°. Paralysis continues, but is less. p.m.—Pulse 84; resp. 16; temp. 98°.

8th, a.m.—Pulse 60; resp. 16; temp. 98°. p.m.—Pulse 64; resp. 20; temp. 97$\frac{2}{5}$°.

9th, p.m.—Pulse 60; resp. 16; temp. 98°.

19th, p.m.—Pulse 64; resp. 16; temp. 97$\frac{3}{5}$°. Paralysis nearly gone. He is now much in his usual state.

That the case of S. S— was one of cerebral hæmorrhage I have no doubt, although my diagnosis was fortunately not confirmed by post-mortem evidence. The amount of bleeding was certainly small; its site probably near the pons. This case does not exhibit any peculiarly interesting phenomena, and I quote it merely to show that the temperature remained, as in all the cases of hæmorrhage into the brain of which I have notes, normal throughout the course of the attack. To meet any objections which may be raised on the score of the absence of post-mortem proof of the correctness of my diagnosis, I may state* that no elevation of temperature has been observed in cases where such proof has not been wanting. The subjective and objective symptoms in cases of hæmorrhagic apoplexy may be such as to induce the non-thermometric observer to believe that the

* On the authority of Dr. Ringer.

temperature is abnormally high, *e.g.*, a woman, æt. 72, during recovery from such an attack, continually complained to me that she felt as if she were "roasted alive;" her face was flushed, and her skin felt hot. Nevertheless the temperature remained normal throughout.

Case 3.—F. W—, male, æt. 40. Admitted February, 1865.

History.—Tried at Leicester Assizes in 1862. Found insane. Supposed causes of insanity, epilepsy and intemperance. Sent to Fisherton Asylum in August, 1862; thence to Broadmoor.

State on admission.—Dulness, and jerking inspiration at right apex; no abnormal cardiac signs; pupils equal; partial paralysis of muscles on right side of face, and of right arm and right leg. When spoken to he at once begins to thump himself with his left hand, and calls out, "Thank God!" "Thank the Lord!" and continues so to do as long as he is watched. He remained much in the same state up to the time at which the observations recorded below were made; he never uttered any words, save the above named; the paralysis did not increase. He had attacks of epileptiform convulsions in 1865, on May 8th, Oct. 3rd; in 1866, on Oct. 3rd, Nov 6th, Dec. 28th.

July 1st, 1867.—At 8 p.m. I was called to see him by the attendant in charge of the ward, because he was in a fit. When I arrived I found him recovering, and his condition to be as follows:

In bed, covered up, lying on back (went to bed at 7·30 p.m.). Pulse, 120; resp., 24; temp., 97°. Semi-conscious; twitches of muscles of face on right side; two slight fits between 8 and 8.15. 8.15.—Pulse, 120; resp., 24; temp., 98°. A very severe fit, beginning by tonic spasm of the muscles on the left side of the body; head drawn forwards and to left; left fist clenched; arm flexed; trunk raised from bed, and curved to left; face livid; fit began by a deep inspiration or semi-articulate cry; consciousness lost immediately. The tonic spasm lasted about four seconds (he then fell back in bed), and was followed by clonic convulsions of muscles of right side of face, arm, and leg; none of left. Sweat in beads on left side of face, none on right; face livid; right eye buried under upper and outer angle of upper eyelid; left slightly turned to right; pupils equal, rather dilated; conjunctivæ pale. 8.20.—Pulse, 100; resp., 24; temp., 101°. Temp. in left axilla, 101°; in right, 101°. Convulsions lasted in their full severity for four minutes, but twitches continued for eight. 8.30.—Pulse, 100; resp., 32; temp., 101°. Consciousness partly returned; face became red, instead of being livid; he passed his left hand over his face, but did not speak. Three slighter attacks; the last at 8.45. 9.10.—Pulse, 104; resp. 24; temp., 98°. 9 p.m.—Is now quite conscious; cried out,

"Thank God! thank the Lord!" directly he became so. No more observations with the thermometer can be taken.

July 2nd.—Is much in his usual condition this morning.

The phenomenon of the gradual rise and decline of the temperature, *pari passu* with the increase and diminution of the severity of the convulsions in this case, might serve as a groundwork on which to build a theory, connecting the etiology of convulsions with that of rigors, were it not for the existence of the fact that in other cases of convulsions (excluding those occurring in the course of acute specific diseases) there is no abnormal rise of temperature. What was the cause of the rise in this case? Without attempting to reply to this question, which I think cannot be satisfactorily answered at present, I venture to quote some remarks which I made on a case similar to the above, of which a report was published in the 'British Medical Journal,' Dec. 15th, 1866:

"The researches of Claude Bernard have proved that irritation of the cerebro-spinal system of nerves, by paralysing the sympathetic, produces dilatation of the minute vessels, increased heat, and augmented chemical action. The phenomena in this case would appear at first sight to be satisfactorily accounted for thus: Here is irritation of the cerebro-spinal system, as shown by the convulsions, producing increased heat and increased flow of the cutaneous secretion, but on the other hand the phenomena of the convulsive attacks of epilepsy are a direct contradiction of this theory, for while in these attacks there is, as I think I may affirm as the result of very numerous observations, no increase of temperature, there is irritation of the sympathetic, causing contraction of the vessels; hence the loss of consciousness, the pallor of the face, the small radial pulse, and the dilation of the pupil."

The fear of wearying by the recital of examples alone hinders me from giving any more than the practical conclusion which I think may fairly be drawn from the data of my not very limited experience in the use of the thermometer in cases of epileptiform convulsions. It is this. The prognosis is very much more unfavourable in those cases in which there exists abnormal elevation of temperature than in those in which it is absent. The value of the knowledge of the fact that in uncomplicated epilepsy the temperature always remains normal, is well illustrated by the case of a woman, aged 24, in whom the elevation of temperature, during a series of convulsions, to $104\frac{1}{5}°$, led me at once to suspect the presence of some disease besides that of epilepsy, and, though there were no marked symptoms pointing to pulmonary lesion, I found signs of tubercular mischief in both lungs, a diagnosis which was confirmed by *post-mortem* evidence.

Case 4.—T. M—, male, æt. 37. Admitted May, 1864. From Taunton Gaol. Tried March, 1864, for assault. Found insane.

State on admission.—Is rational. Says that at Christmas he began to drink, and remembers nothing from the time he told his wife everything was going round and asked her to hold him, until he found himself in the county asylum. Recollects nothing of the assault.

July 17.—Has been behaving quite rationally until last night, when he became very restless; walked about the dormitory, and wound a sheet round his neck. Cut his hands to be like Christ.

October 31st.—Is suffering from a similar attack.

December 21st.—Ditto.

1866.—December 16th, February 11th.—Ditto.

June, 1867.—Some tremulousness of the facial muscles as he speaks. Pupils of unequal size, the right being the larger.

July 1st.—Has been out of sorts for some days; complains of feeling cold. Paralysis of right facial. When spoken to, he begins to talk at once, and rambles on in a most incoherent manner. Tremor of muscles on left side of face. P.M.—Has been in bed all day. Pulse 120; resp. 24; temp. 97$\frac{3}{5}$°.

2nd, a.m.—Pulse 100; resp. 24; temp. 98°; head hot; pupils irregular, dilated, right larger than left. Paralysis and tremor continue. Is excitable and talkative; incoherent, and has numerous delusions. P.M.—Pulse 100; resp. 24; temp. 98°.

3rd, p.m.—Pulse 106; resp. 24; temp. 98°. Excited, talkative, and abusive; face flushed.

4th, p.m.—Pulse 100; resp. 24; temp. 98°. Is much better. Paralysis continues, but tremor gone.

Case 5.—T. B—, male, æt. 30. Admitted July 18th, 1867. Tried in 1864, for housebreaking. Sentence seven years' penal servitude; became insane during servitude.

August 8th, a.m.—In bed; pulse 64; resp. 36; temp. 99$\frac{1}{5}$°. No abnormal chest signs; paralysis of right facial; pupils equal, rather contracted; conjunctivæ pale; brows knit. Says he feels giddy when he gets up; skin moist. Is very excitable, continually shouting to a man whom he imagines to be at the top of the building. P.M.—Pulse 64; resp. 32; temp. 99°.

9th, p.m.—Pulse 84; resp. 24; temp. 99°. Continues to be excitable and noisy.

10th, p.m.—Pulse 80; resp. 16; temp. 99$\frac{1}{5}$°.

11th, p.m.—Pulse 62; resp. 20; temp. 99°. Continually noisy, both by day and night.

12th, p.m.—Pulse 80; resp. 20; temp. 98$\frac{1}{5}$°. Has been quiet during the whole of last night and to-day. Expression of face much quieter.

14th, p.m.—Pulse 60; resp. 20; temp. 98$\frac{3}{5}$°. Is quieter, and feels better.

Case 6.—J. R—, male, æt. 58. Tried for arson at Salop Assizes, July, 1832. Found insane. Admitted November, 1864, from Salop Asylum.

State on admission.—No abnormal chest signs; is demented, and can give very little account of himself. Says he is fifteen years old, and has only been six years in confinement. Occasionally wet at night.

May, 1865.—Very demented; employs himself in dusting. Still says that he is "fifteen years old."

November, 1866.—Has been very excited and talkative during the last week. Is incoherent, and gives no rational answers to questions; runs up and down, and rambles about the ward and airing court.

August 10th, 1867.—In bed; face flushed; both ears red, and a little swollen; tongue white; bowels confined. Is continually talking incoherently. Was very restless and noisy last night. A.M.—Pulse 92; resp. 20; temp. 100°. P.M.—Pulse 84; resp. 20; temp. 100$\frac{1}{5}$°.

11th, a.m.—Pulse 60; resp. 20; temp. 99$\frac{1}{5}$°; skin moist; pupils equal, small; brows knit. Complains of feeling cold; continues talkative and noisy. P.M.—Pulse 64; resp. 16; temp. 99$\frac{3}{5}$°.

12th, p.m.—Pulse 64; resp. 16; temp. 99$\frac{1}{5}$°. Continues to be talkative and noisy, both by day and night. Pupils equal, contracted; tongue white.

13th, p.m.—Pulse 60; resp. 20; temp. 99$\frac{1}{5}$°.

15th, p.m.—Pulse 80; resp. 20; temp. 99$\frac{4}{5}$°.

18th, p.m.—Pulse 58; resp. 16; temp. 99°. Is much quieter.

20th, p.m.—Pulse 60; resp. 16; temp. 98°. Is now much as he was before the attack.

Case 7.—J. H—, male, æt. 31. Admitted October 20th, 1864. Tried at Leeds for murder, August, 1864. Found insane.

State on Admission.—Chest sounds normal. When questioned about the crime, he sheds tears, and can hardly control himself; says that he had not slept for a week before the commission of the act; that eighteen months since he was desponding and sleepless, but that he recovered himself after a time.

March, 1865.—Is restless and excitable; face flushed.

September.—Has been quiet and unexcitable for a considerable period.

May, 1866.—Is again excitable and restless; says that he wakes up at night with a feeling of dread, as if the world were coming to an end. Complains of pain in the left frontal region.

November 15.—Had been quiet since last report, until this evening, when he rushed out of his room, took up a chair, and broke seven panes of glass in the gallery.

February, 1867.—Has been quiet, and employed in garden since last report. During the intervals he is perfectly rational; has no delusions. He always tells the medical officer when an attack is coming on, and asks to be secluded, in order that he may do no harm to any one.

March 21st.—In bed; face flushed; conjunctivæ injected. Pulse 80; resp. 24; temp. 97⅖°. Says that he felt yesterday as if he must commit some act of violence; complains of much pain in his right frontal region; did not sleep last night. P.M.—Pulse 80; resp. 20; temp. 98°.

22nd, a.m.—Pulse 60; resp. 20; temp. 98°. Headache much better, but he had no sleep last night.

April 8th.—Is now recovered.

August 25th.—Remained well until to-day. This morning he was seen by me lying on a bench in the day-room in a sleepy, stupid state; face flushed; complains of feeling ill, and says he wishes to go to bed. P.M.—Pulse 64; resp. 16; temp. 99⅖°; face flushed; sclerotic injection of both eyes, pupils equal; no paralysis; tongue brown; bowels confined.

26th, a.m.—Could not sleep last night. Says people visited him and tormented him; head feels heavy. Pulse 48 (full); resp. 16; temp. 99°. P.M.—Pulse 48; resp. 16; temp. 98⅗°; face still flushed, and eyes injected; lies with eyes partly closed.

27th, a.m.—Pulse 48; resp. 16; temp. 98°; says he feels mazed; could not sleep last night.

28th, a.m.—Pulse 80; resp. 16; temp. 98°; says he feels much better; manner more natural, and less excited. P.M.—Pulse 80; resp. 16; temp. 98°.

29th, p.m.—Pulse 44; resp. 16; temp. 99°; does not feel so well this evening; face flushed; brows knit.

30th, p.m.—Pulse 48; resp. 16; temp. 99⅖°; is still restless and unsettled.

September 1st.—Is now nearly recovered.

Case 8.—A. H—, æt. 44. Admitted June, 1863. Tried at Devizes, 1861, for larceny, and sentenced to eight months' imprisonment. Became insane during imprisonment. Sent to Devizes Asylum in 1861. Is subject to attacks of recurrent mania. During one of these attacks the following notes were taken.

April 13th, 1867, p.m.—Pulse 84; resp. 20; temp. 98°. Tongue furred; face flushed; bowels confined. Is noisy, and talks continually in an incoherent manner. The sentences she utters appear to have a sort of rhythmical cadence.

August 15th, p.m.—Pulse, 64; resp., 20; temp., 98°. Continues much as yesterday.

16th, p.m.—Pulse 60; resp. 24; temp. 98°.

17th, p.m.—Pulse 60; resp. 20; temp. 98°. **Is now recovering.**

Conclusions.—From the cases here given (and from others of which I possess records, of which the temperature reached even a higher degree, viz. 100° to 100⅕°), it appears that in some examples of uncomplicated mania the temperature is above the normal standard, though not considerably, and that in some other examples it remains normal. Although the number of examples is not nearly sufficient to justify any definite conclusion as to the pathological condition of the encephalon in each order of cases, yet the balance of probabilities would appear to lean somewhat to the side of the idea that there exists an overfulness of the capillary blood-vessels of the membranes or of the cortical substance in the former class, and not in the latter; and perhaps the thermometer may at some future time serve as a guide in the diagnosis, prognosis, and treatment of such cases.

In none of the cases did I find any notable depression of temperature below the normal line.

Case 9.—C. C—, male, æt. 40.

History.—Tried at Middlesex Sessions for larceny, after previous conviction, in August, 1864. Sentenced to seven years' penal servitude. Became insane during servitude. Admitted into Broadmoor Asylum April 9th, 1866.

State on admission.—No abnormal signs in chest; pupils, equal act to light; no strabismus; ophthalmoscopic examination shows nothing abnormal, save very slight cupping of the papilla in both eyes; right ear is "shrivelled;" tongue, protruded straight with difficulty, is tremulous; speech very indistinct; muscles of lips and face tremulous; there is no hemiplegia; face smooth; gait unsteady; he walks with legs wide apart, and drags his toes; he can button and unbutton his waistcoat, and pick up small objects, but has difficulty in directing the movements of his fingers; swallows with difficulty; his food is minced for him. He is continually wet; last night he passed a motion in his bed. There is no loss of sensation in tips of fingers, palms of hands, or face.

Mental state.—He sits in his chair, eyes half-closed, in a semi-doze, with hands on knees. Gives no answer to questions, save that when asked how he is, he says, "I am all right," and laughs. Occasionally talks to himself, repeating the same phrase, "The lagging is done!"

Feb. 14th, 1867.—Has remained much in the same state as on

admission until last evening, when, whilst having a warm bath, he became faint. He was ordered to bed at once.

His state on February 14th was as follow:—Pulse 96; resp. 24; temp. 101°. Skin feels hot to hand; face flushed; pupils equal, contracted, do not act; twitches of muscles of face most marked on right side; no hemiplegia; twitches and tremulousness of muscles of upper limbs. When uncovered he seems to be much distressed; tries to replace the clothes, and says, "The head say he must be quiet." Passed his motions and urine under him in the night. He recovered in a few days from this attack, but the paralysis was increased somewhat afterwards.

August 8th.—Had another fainting fit to-day. Is now in bed, is drowsy, and stupid; no convulsions. Pulse 64; resp. 20; temp. 98°.

12th, p.m.—Still remains in bed. Tongue white; skin dry; pupils equal; no convulsions; is very heavy and stupid; face flushed; no abnormal chest signs. Pulse 84; resp. 16; temp. $100\frac{1}{5}°$.

13th, p.m.—Pulse 100; resp. 16: temp. $101\frac{1}{5}°$.

14th, p.m.—Pulse 100; resp. 16; temp. $102°\frac{1}{5}$. Continues much as on Aug. 12th.

15th.—Sleeps nearly all day; face flushed. P.M.—Pulse 80; resp. 20; temp. $100\frac{2}{5}$. Sweating profusely.

18th, p.m.—Pulse 58; resp. 16; temp. 99°. Is much better, and more lively. Asks what o'clock it is on seeing a watch, and seems inclined to talk.

20th.—Is much as before the attack. P.M.—Pulse 60; resp. 16; temp. 98°. I quote this case of general paralysis mainly on account of its being an example of the truth of the statements of Ludwig Meyer, and of Dr. Saunders, that during the congestive attacks to which such patients are subject when epileptiform fits come on there is elevation of temperature. I have not found, however, as the latter physician's observations seem to have led him to believe, that there is any abnormal depression of temperature in such patients, at least not when care is taken to supply them with a sufficient amount of food and warmth.

The phrase made use of by this man, "The head say he must be quiet," expresses well the usual condition of this class of patients. They dislike to be disturbed, cover themselves over when the bedclothes have been turned back, cry out when they are being washed, object to have their soiled garments removed. (These peculiarities have not unfrequently been the cause of charges of cruelty being unjustly brought against attendants and others.) They are most happy and contented when left alone. There is no hyperæsthesia of the skin; at least I think not. They will, if allowed, sit in front of the fire until the skin is actually scorched without complaining.