Treatment.—Although the different varieties of acne are but so many forms of the same disease, still the treatment should vary according to the variety present, and the cause which produces and keeps it up. Unless the causes on which it depends are understood and taken into account, the treatment will be of little avail. When the simple form of the disease is present, and the patient is young and vigorous, M. Biett generally adopted the following treatment, and with success:—Venesection, the frequent application of leeches behind the ears, simple baths, emollient lotions, and an occasional mild aperient. When the inflammation has subsided, or in cases where there is not much local irritation, a gently stimulant lotion, composed of rose-water, lavender, sage, and a small quantity of alcohol, will be found very serviceable. M. Biett was in the habit of using Gowland's lotion, or one very similar to it, the "*eau rouge*" of St. Louis. I have seen obstinate cases of *acne punctata*, which had resisted every other treatment, cured by the application of blisters to the parts. When the disease occurs in females at the critical period, or when the menses are suppressed, leeches should be applied to the groin and vulva; the warm vapor bath and tepid emollient lotions should also be directed to those parts, and the patient should sit over a vessel containing water at a high temperature several times during the day. In *acne indurata*, venesection and mild purgatives, especially if there is inflammation present, and if the patient is of a plethoric habit, will be the most appropriate remedies. The only ointment that can be employed with benefit is one composed of the ioduret of sulphur and lard. The proto-ioduret of mercury ointment, however, has sometimes been recommended.

The Harrogate waters, used *externally*, in the form of lotions, baths, and douches, will also prove serviceable. The vapor douche, applied to the diseased parts for ten or twelve minutes at a time, provided there is no inflammation present, will be found to be the most efficacious remedy in this variety of the disease.

Acne rosacea will require local bleeding at the commencement, and strict hygienic measures. The exciting causes should be carefully avoided—as, for example, high living, spiced food, wine and spirits, mental excitement, heated apartments, sitting near stoves or fires, &c. The vapor douche, and some discutient ointment, if the tubercles are indolent, will be very useful. The red stains which remain on the skin after the disease has subsided, and which disfigure the face so much, require our best attention. Warm milk, mucilage of quince seeds, and local applications of a similar nature, but especially cold sulphureous waters, as those of Harrogate, employed in the form of douche, will be attended with most benefit. The treatment ought to be continued even after the eruption has disappeared, for it is subject to relapse, and it is obvious that in a disease of such a rebellious character, the strictest rules with regard to diet should be enforced, and, above all, spirituous liquors, wines, &c., should be prohibited, and abstained from altogether.

29, Margaret-street, Cavendish-square,
January 10, 1843.

TWO CASES OF HYDROPHOBIA,

WITH REMARKS ON THE PATHOLOGY AND TREATMENT
OF THAT DISEASE.

By WM. JACKSON, Esq., Sheffield.

[Read before the Sheffield Medical Society, Dec. 29, 1842.]

CASE I.—Thomas Thorpe was the subject of the first case; his age was seventy; he was of rather spare habit; he had spent the middle period of life in the army, and, whether from that circumstance, or from original tendency, exhibited the character of a man of great firmness of mind, in illustration of which fact he observed, with great animation, during the progress of this terrible malady, that he had never turned his back to an enemy, at the same time seeming to imply that he would struggle hard to overcome the fearful antagonist against which he was then engaged in mortal combat. Thorpe followed the occupation of a laboring man; had been married, and had several children. Two of his brothers and a sister committed suicide; but he had never exhibited any tendency to destroy himself, and his health had been good throughout life. Thorpe resided in the village of Maltby, about twelve miles from this town, and it was at that place where he was bit by a farmer's dog, used for driving sheep, during the last week in August. The wound was inflicted upon the right eyebrow, was small, not lacerated, but deep, and bled slightly; he washed it well with rum, and took but little more notice of it, the healing process being completed in about a week. The same dog bit a boy three days afterwards; and after that a man, and several dogs; and appearing to be laboring under illness was confined, and soon afterwards died, evidently in a rabid state.

Without having complained of indisposition in any marked way, Thorpe was disturbed from his sleep in the middle of the night, between twelve and one (4th and 5th October), and feeling thirsty, called for some water, which he attempted to drink, but found great difficulty in swallowing it, and his subsequent efforts at deglutition of fluids became more and more distressing to him; his mind was put into considerable perturbation; he slept no more that night, nor did he sleep at all during the short period he was doomed to live. Fancying he could get some relief at Sheffield, early in the morning he proceeded thither, where one of his daughters resided, and immediately applied for medical assistance. Mr. Booth, surgeon, of this place, first visited him, and, finding what he had to contend with, soon consulted some of his brethren in the profession, amongst whom was the author of these remarks. During the 5th the general symptoms characteristic of hydrophobia had become established—viz., the dread and difficulty of swallowing fluids, although the former was not so striking as the latter, probably owing to the courageous feeling of the patient; he was not so soon excited by currents of air, or beholding bright substances, &c., as some afflicted by this disease are represented to have been; yet he complained of the agitation of the air disturbing his respiration, and occasioning a very distressing sense of suffocation. He felt a sense of considerable exhaustion from his first seizure, and staggered when walking across the bedroom; his pulse was from

120 to 130, rather weak; tongue covered with a thick white fur; much thirst complained of.

On the night of the 5th, and throughout the 6th, his symptoms varied but little; and if the room in which he was placed were quite still, and no strangers introduced, he would, on various occasions, appear, to a person listening in concealment, as if he were free from ailment. On the introduction of a stranger or of one of his medical attendants, he would rapidly rise from his bed, and talk with great vehemence and agitation of manner, occasionally sobbing and making frequent attempts, by imperfect efforts, to vomit and cough, to remove a copious secretion of saliva or phlegm, which troubled him much. He complained of no pain, either in his head or in any other organ, during the whole course of his suffering. It was with much difficulty he could put out his tongue, the effort to do which gave rise to those distressingly associated actions about the larynx, pharynx, and the general respiratory system, which constitute the leading features of hydrophobia.

This day (6th) one remarkable circumstance rather puzzled us: the pulse, which, as was before stated, sustained the high range of 120 to 130, settled down to 100, with no other peculiarity. There can be no doubt that the habitual firmness of mind, and the course of life which Thorpe had led, considerably modified his case, and gave it less the character of a merely nervous affection than some others on record.

Thursday night, being the fourth night from the seizure, was passed in a dreadful state of alarm of mind and spasmodic struggle of body, in the midst of which he several times attempted to injure his attendants in various ways. In the morning we found him bound down in bed and gradually lapsing into a state of insensibility, in which condition he continued till three, p.m., when he expired.

CASE II.—On the Monday following the Friday on which Thorpe was bitten, the same dog bit a little boy (William Clarke), aged eight, residing in the same village. The wound was inflicted, as in the case of the old man, upon the supercilium of the left eye, and was washed, and brandy afterwards applied. Common dressing was used and it healed in about a week. The dog being considered in a diseased state, the father of this patient procured some medicine in the neighbourhood, supposed to be a specific for hydrophobia, and the lad had continued to take it till the formidable symptoms of that disease appeared. It will be remembered that the active disease supervened in Thorpe on the 4th of October, whereas it was not till Tuesday, the 8th day of November, that the subject of the present case was seized. It was in the night, as in the former case, that the first alarming symptoms appeared. The boy awoke in a fright, and, disturbing his father, asked for some water to drink; but on attempting to swallow it experienced a sudden difficulty, as if there was a constriction around his throat, and he gave up the effort, upon which his father procured some warm tea, thinking it was the coldness of the water which occasioned the distress, but with this the poor boy was as much distressed as before, for, on attempting a second time, the difficulty was still greater, and he relinquished his intention with a feeling of horror.

Mr. Flower, a surgeon of the village, was now

called in, and he prescribed some aperient medicine with antimonials, which occasioned sickness. It was with the greatest difficulty and distress that any fluid could be swallowed. The little patient had frequent attacks of a convulsive nature during the two following days, except on Thursday afternoon, being the third day from the first seizure, when he appeared much better, and engaged in play with a younger brother for whom he offered to make some toys. This state was followed in a few hours by still more alarming symptoms than before, and through the greater part of Friday he suffered from frequent attacks of severe spasms of the throat and chest, almost impeding on many occasions the action of respiration. He died, apparently exhausted, in one of these attacks in the afternoon of Friday, being the fourth day. The duration of the disease in both these cases was within a few hours of the same period. They were both wounded upon the eyebrow. The old man was insensible during the last six hours of the attack, having struggled hard all night, so as to render restraint quite necessary, but the latter case terminated under a paroxysm of convulsions.

The treatment consisted in the exhibition of large doses of opium and mercury externally and internally used; Thorpe was so distressed by the friction of the mercurial liniment upon the abdomen and thighs as to resist its further use, and would not allow the medical attendants who had advised its use to enter his room without being put into a violent rage, and made attempts to commit violence upon them. Croton oil was administered with a view of acting as a purgative, but all attempts to relieve his bowels were perfectly fruitless, and the patient for the last two days of his illness resisted any means recommended for his relief.

Inspection of the Body of William Thorpe, Forty-three Hours after Death.

External Appearance.—That of a stout, healthy, and slightly muscular man. On the lower part of the neck decomposition appeared to have commenced, the green discoloration being present more on the right side of the larynx than the left; the same discoloration appeared over the abdomen to a greater extent. The back and lower parts of the body were discolored from gravitation. Two extremely small white points (cicatrices) were with some difficulty discovered on the right eyebrow.

Cerebrum.—The arachnoid was irregularly opaque and the vessels much congested; on the right hemisphere, about half an inch from the longitudinal fissure, in the middle was a deposit of organised lymph. On cutting into the substance of the brain, there did not appear to be much alteration, excepting that both the cortical and medullary structures were of a darker color than usual. Ventricles contained a quantity of fluid slightly stained with blood. Nothing particular in the appearance of the choroid plexus. The brain (cerebrum) may be considered to have been firm and healthy, the membranes being the only parts apparently affected.

Cerebellum.—The cerebellum, medulla oblongata, and about one inch and a half of the medulla spinata were removed. Much greater opacity of the arachnoid, and the congestion of the vessels much more evident. Over the pons Varolii there was very great vascularity, so as to give nearly an uniform red coat

to that part; the intensity of this redness gradually diminished on proceeding down the medulla as far as it was cut.* Vascularity much greater over, and in the convolutions of the cerebellum, than on the cerebrum. The structure of the cerebellum was healthy. Opacity of the arachnoid, and injections of its vessels, much more marked on the under than the upper surface of the cerebellum.

Larynx.—Larynx removed together with pharynx. On opening the pharynx posteriorly, a quantity of mucus was found covering its lining membrane, with here and there, particularly on the posterior surface of the larynx, small red patches. (Inflammation or congestion?) The lining membrane of the larynx was slightly thickened, but did not present any appearance of injection.

Thorax.—Lungs and heart presented nothing remarkable, saving that on the anterior surface of the right ventricle was a large but thin deposit of lymph, evidently of old standing.

Abdomen.—Liver natural, containing rather more blood in a fluid state than usual; gall-bag distended with bile; stomach injected in patches in its structure generally, but it altogether presented an appearance of great congestion, being of a dark red color, and on the lesser curvature, near to the cardiac orifice, some vessels (veins) were very much injected, appearing as if extravasation had taken place on the surface. The internal lining presented some small patches of congestion, and was covered with bilious matter. Ilium inflated; cæcum slightly so; colon, &c., contracted, but all of natural color; spleen remarkably small, about one fourth of the usual size, but natural; kidneys normal, perhaps slightly more vascular than usual.

Post-Mortem Examination of the Body of William Clarke, Forty-three Hours after Death.

Turgescence of the venous system of the cerebrum; also the general appearance of bloody spots in the medullary substance of the brain.

An extremely injected state of the vessels of the pia mater, covering the pons Varolii, and surrounding the whole of the medulla oblongata; great vascularity of the mucous membrane of the stomach, but most particularly so in the duodenum; the mucous membrane of the pharynx generally in an injected state, as well as that covering the epiglottis; a highly injected state of the mucous membrane of the trachea and its ramifications; the mucous membrane lining the larynx was but slightly injected.

In the former case especially, and it is probable also in the latter, the patient complained of no pain in the seat of the original wound; nor was there found, in either case, any vesicular formations under the tongue. The mode of death, as I have elsewhere observed, was different; the old man dying in a comatose state, but the boy under the exhaustion of convulsive paroxysms.

REMARKS.

The symptoms of hydrophobia bear a singular resemblance to some forms of nervous disorders; and if it were not from our previous knowledge of the ine-

vitably fatal nature of the disease, we should be inclined to offer a favorable opinion as to the result. The intermissions of the spasms and general excitement, during which the patient seems tranquil and almost free from ailment, the pulse and state of watchfulness only being excepted, would lead one unacquainted with the disease to infer, not only that the sufferer was free from immediate danger, but even that his recovery might be rationally hoped for. The disease to which hydrophobia bears the greatest resemblance is hysteria, in which we notice the globus, spasms, and hurried or irregular state of respiration, all occurring in the paroxysmal form. The most remarkable and distinguishing feature in hydrophobia, especially in its advanced stage, is the copious secretion of saliva and mucus, the seat of which seems to extend through the mucous membrane of the mouth, pharynx, œsophagus, and larynx. This secretion seems to act as an exciting cause of the spasms, and the efforts to dislodge it constitute an almost incessant labor and distress, thus exciting a combined effort of those powers concerned in the act of vomiting and coughing, partially and imperfectly exercised.

The most remarkable symptoms of hydrophobia are confined to the organs supplied by the pneumogastric nerves; and it is highly probable that the distress arising from an attempt to swallow fluids excites the respiratory organs, and produces that singular train of spasmodic actions which occupies the organs of deglutition and respiration. This view, as we have seen, is borne out by the morbid appearances. The most prominent symptoms of this horrible malady appear to be seated in the nervous system; but, inasmuch as the intellectual powers are generally unimpaired, we should, from a consideration of the locality of the deranged actions, infer that the medulla oblongata and spinal marrow, or both, and probably the cerebellum were the seat of, at least, the proximate cause of the disease. But a difficulty still presents itself. What we consider a cause is probably but an effect, and so may be other morbid appearances which present themselves in these cases. The blood, it is highly probable, is the real seat of the *materies morbi*, the specific force of which is determined to that portion of the nervous system connected with and including especially the pneumogastric, phrenic, and spinal accessory nerves, from a deranged action of which all the phenomena of the disease may be deduced. It is highly probable that the visible remains of the inflammatory action in the medulla oblongata and contiguous parts, together with the similar appearances in the pharynx, larynx, œsophagus, and stomach, may be the result of excessive actions of those parts occasioned by inappreciable derangements in the blood, or more probably from the poisonous principle of hydrophobia circulating in that fluid, and acting in accordance with the laws manifested in other cases by which the secondary actions of the morbid cause are determined to particular parts, thus giving the disease its peculiar character.

The patients die, as it appears, from exhausted excitability. During the progress of the least complete development of hydrophobia there is not an interval of perfect repose—no sleep—and although the disease is manifested by severe paroxysms, yet the intervals are not states of complete quiescence, but a kind of

* The vessels of the pia mater in connection with the medulla oblongata, especially about the parts which give rise to the filaments of the pneumogastric nerves, were highly injected.

anxious waiting for recurring excitement. There are several convulsive diseases of apparently equal severity to this, but which terminate generally in recovery; as examples, we may notice epilepsy and severe forms of hysteria. The nervous system in hydrophobia is under the influence of a more permanent morbid impression than exists in those diseases, and one which, unhappily for mankind, neither the powers of the constitution nor the resource of our art have yet been able to counteract; and although I should not feel disposed to discourage the most energetic use of every rational means for the relief of those who have the misfortune to be afflicted by this dreadful malady, yet a kind of melancholy feeling hangs upon my mind, that, after its actual development, hydrophobia will never be cured.

In order, as it appears to me, to secure a probable chance of success, we should acquire possession of the constitution first; or, in other words, anticipate the symptoms indicating the presence of the disease by some powerful stimulus, on the principle of one general action preventing or superseding another. In order to attempt the accomplishment of this object, I would recommend the administration of mercury in all cases of persons who have suffered from the bite of an animal known to be in a rabid state, and that such individuals should be kept under the moderate influence of that mineral during a period of at least three months. It is true, mercury has been generally resorted to in hydrophobia, but it has, as far as I know, only been used after the peculiar symptoms of the disease have manifested themselves, and whether its specific effects have, under such circumstances, been fully established, is doubtful, owing in some measure to the tendency in this disease (hydrophobia) to excessive secretion of the salivary glands and mucous surfaces of the pharynx, &c. My idea is, as before stated, to get the first possession of the system, and we know of no stimulus so steady and general as that of mercury. It unfortunately happens too generally that the treatment of persons bitten by rabid animals is referred to empirics, to some notorious or inefficient nostrum or pretended remedy, and it is only when the last horrible symptoms manifest themselves that a medical practitioner is consulted.

There are some writers on hydrophobia who consider the disease to be much connected with the imagination; but surely these two cases tend amply to refute such an opinion, the old man possessing remarkable firmness of mind, and the boy quite free, easy, and unconscious as to the dangers of his situation.

On referring to the article in the "Encyclopædia of Medicine," by Dr. Bardsley, on Hydrophobia, he divides it into three stages, the second being what he terms the stage of recrudescence, having reference to the reopening of the original wound. In the first case, the original wound never reopened, but remained firm from the first healing till death. In the second, this state (reopening) of the cicatrix was observed about four or five weeks before the symptoms of hydrophobia appeared.

CASE
OF
EFFUSION ON THE BRAIN
AFTER SCARLATINA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I send you the following case of effusion on the brain for insertion in your Journal, if you deem it of sufficient interest to occupy a place in its columns.

Your obedient servant,

THOMAS A. S. STOCKER,
Member of the Royal College of Physicians,
London, and Senior Physician to the
Ludlow Dispensary.

Ludlow, January 10, 1843.

Mary Weaver, aged fourteen, has never menstruated; is a child of fair complexion and light hair; had scarlatina simplex, accompanied with very little sore throat. This account I heard from her sister. No medical man was called to attend her during the disease. Nearly one month had elapsed when I was sent for.

August 7, at ten in the morning, I found her lying on a sofa; the countenance was pale; the extremities cold; pulse at wrist scarcely perceptible; action of the heart weak; she was deaf, and quite blind; the pupil was greatly dilated; convulsions; bowels confined. I may here state, she had frequently complained, for more than a week, of great pain in her head, and occasional giddiness, attended with faintness. During sleep she talked and screamed, so as to be heard over the house. She eat a hearty breakfast of ham and bread and butter, with tea; before I left she was very sick, which I felt anxious to encourage, and endeavoured to give some mustard in warm water, but without success. I ordered ten leeches to be applied to the temples, and mustard poultices to the feet; cold applications to her head; enema with castor oil and gruel, immediately; four grains of calomel, with twelve of scammony, in the evening. The cataplasms remained on more than one hour, and she took some portion of the powder. Frequent and strong convulsions now occurred; the pupil was still dilated; the head hot; bowels not open. The leech bites bled freely, apparently with some relief; there was a restless tossing of the head about, and the legs were drawn up, as if the patient suffered from pain in the bowels. The following powder to be taken immediately:—

Calomel, four grains;
Croton oil, one drop.
Continue enema.

Has passed no water, and very little motion, and that of a hard and scybalous nature; was quite unconscious of its coming away; feet still cold. Repeat cataplaasm and cold application to the head. Difficulty in swallowing; lips to be moistened with wine and water.

8. Is in very nearly the same state as yesterday. Pupil still dilated; insensible to light; bowels open a little; several attacks of convulsions during the night, which at length produced great weakness and exhaustion; pulse low, 60; not any sleep. Ordered a small quantity of tea, toast and water; to take