

Water boiled at 184°. It is certainly a reasonable hypothesis that barometric (with hygrometric changes) may induce sanguineous effusion in those persons in whom the vascular system is already diseased. Apoplexy may thus be induced; indeed, the more frequent recurrence of that affection at the equinoxes has been thus explained. This result would, hypothetically, be more certain when the diurnal barometric period and the hebdomadal are coincident; as was undoubtedly the case in the instances of hæmorrhage detailed by Dr. Pitcairn, and referred to in my last communication. However, what theory soever we may adopt, it is quite certain that atmospheric vicissitudes influence vital action most extensively. For the country resident, spiders, a leech in a bottle, sheep or cattle in a field, or rooks, are efficient substitutes for the barometer; while, to the citizen, a rheumatic joint or a tender corn foretell a change in the weather as surely, often more surely, than the weather-glass. It is, undoubtedly, difficult to explain the nature and *modus operandi* of atmospheric influences, but the facts to be observed, and through which the proper knowledge may be attained, are proportionately numerous and accessible. Little more is necessary to its attainment than systematic, sedulous, and persevering observation.

In my next communication I shall consider the changes in vital action, occurring at annual or longer periods.

York, Aug. 26, 1843.

HECTIC FEVER.

As it is the fever which comprises local irritation (especially suppuration), surgeons may be permitted to *remove the cause*, as by amputation. The effect is wonderful. Sleeplessness, colliquative sweats, and purging, cease at once. In hectic fever watch and check the perspiration; take care not to throw the action on the bowels; nourish with light food; support with appropriate tonics.—*Sir Charles Bell*.

GLANDERS.

WHENEVER an animal is suspected of having this disease, the groom, or person attending it, should make a strong solution of alum, and keep it by him in the stable. As often as he has occasion to go near the horse, he should immerse his hands in the alum solution, and keep them there for some moments. Alum is an astringent, closing the pores of the skin of the hand, and which can consequently, for a certain time, prevent absorption of poisonous matter from taking place. Perhaps other astringents, as sulphate of copper, would answer as well, but alum is cheaper, more easily managed, and equally efficacious. If there be a cut on the hand it should be carefully covered with adhesive plaster.—*Veterinarian*.

PRACTICAL OBSERVATIONS

ON THE

CURATIVE EFFECTS OF BELLADONNA

IN CERTAIN AFFECTIONS OF

THE NERVOUS SYSTEM.

By R. S. HUTCHINSON, M.D., M.R.C.S.,
Senior Physician to the General Hospital
near Nottingham, &c. &c.

HAVING for a considerable period been engaged in noting the effects of belladonna upon certain morbid affections of the nervous system, I am desirous of placing before my medical brethren, in a condensed and concise form, their results,—knowing how impossible it is that the limited extent of one practitioner's observations can substantiate any important practical fact in medicine, and hoping to induce others to afford this active remedy an impartial trial,—and by this believing that, should their experience lead to the same conclusions I have arrived at, that a valuable remedial auxiliary may be reclaimed from obscurity,—or, on the contrary, if not found as effectual as the belladonna in certain morbid affections is believed by me to be, that it may be left to share the fate of other vaunted remedies, and thus, in either case, an approach to truth attained.

The belladonna has been long employed on the continent, and more particularly in Germany, as a means of relieving pain of a neuralgic character when administered internally; in this country it has been rarely used, excepting as an endermic application, and but little confidence has been placed in its utility. This appears to be principally owing to the apprehensions entertained regarding the dangers attending its administration, which have deterred many from giving it a trial. The following observations are undertaken to show in what cases the belladonna may be given internally with safety and advantage, and under what circumstances dangerous results may be anticipated and expected. The extract of belladonna has been the preparation I have employed, and it is essential that in its further application medicinally, the purity and tested efficacy of the preparation, by the effects produced upon the iris, should be satisfactorily ascertained.

That the poisonous effects of an over-dose of belladonna are mainly exerted upon the cerebrum, there can exist but little doubt; the delirium, cerebral excitement, and subsequent effusion, in fatal cases, prove this to be the case; and the absence of convulsions in the only fatal case which I have witnessed leads me to infer that it is the true cerebral, and not either the cerebro-spinal or true spinal system of nerves upon which any injurious effects are exerted. Should the extended

experience of others substantiate this, it is obvious that the employment of this remedy cannot be safe when any cause of cerebral excitement or any symptom of determination to the brain is existing, and that the presence of any such symptoms precludes its safe administration; and it has appeared in a very striking manner to me that the beneficial effects of the belladonna are particularly and directly exerted upon the nerves of sensation of the true spinal system, or upon those immediately resembling it, such as the fifth pair of cerebral nerves. All modern authors (see the works of Thomson, Brande, Christison, &c.) consider the belladonna or its active principle as being sedative or narcotic upon the brain and nervous system; but under what sign does this narcotic effect present itself? The first symptoms attending its over-dose are those resembling intoxication,—insomnia, unreasonable laughter, elevation of ideas, dilated pupil, &c. These surely are the phenomena of excitement, and the only sedative appearance exists when the poison has extended its effects to the production of effusion, when coma and slight convulsions are the consequence of pressure caused by the fluid effused, and a fatal result is rapidly approaching. See the effects of an over-dose of opium: here the first symptoms are depressant upon the brain,—stupor, disposition to sleep, coma, stertorous breathing, followed by convulsions of an active character, and death. In the one case are remarked the usual signs of cerebral excitement, unattended by convulsive action from any irritating cause, exerting itself upon the true spinal system; in the latter, prominent symptoms of cerebral congestion and depression, accompanied and followed by irritation of the nerves of the true spinal system, indicated by spasmodic convulsions and cramps. From this, and from observing the effects of belladonna when administered remedially, I have been led to infer that its primary action is as an excitant to the cerebrum and its nerves, as a sedative to the spinal marrow and the nerves of the cerebro-spinal system; precisely opposed to that of opium, which assuredly in its effects exerts a sedative and narcotic influence over the cerebrum and true cerebral nerves; whereas the convulsions which accompany its administration, and the increased sensibility to the ordinary stimuli exciting reflex action caused by it, lead to the inference that opium increases the irritability of the spinal marrow and of the spinal nervous system generally. Should these prove correct principles it is obvious how important is their application practically, and how necessary it is to avoid the administration of opiates in convulsive affections induced by direct or reflected irritation of the nerves of the true spinal system, such as in hydrophobia, tetanus, chorea, &c., diseases in which these remedies have been too freely and fre-

quently administered; as well as pointing to belladonna as a probable remedy in such cases, and its injurious effects upon those presenting symptoms of cerebral congestion or excitement. During the last winter I endeavoured to substantiate the truth of these opinions experimentally upon animals, attempting to ascertain if opium increased the reflex sensibility of the spinal marrow, and if belladonna depressed it; this was tried by giving either of these medicines to an animal, then cutting off the connection between the cerebrum and medulla spinalis by dividing the latter between the occiput and atlas, and ascertaining, by the stimulus of electricity, if the reflex sensibility was elevated or depressed by either poison, previously taking an unmedicated animal of the same species, size, and weight, as the point of comparison. No conclusion of a satisfactory nature could be arrived at by these experiments, as it was found that dogs and rabbits (animals experimented upon) were but little influenced by either of these medicines. I have in my possession a rabbit into whose stomach a solution, containing two drachms of the extract of belladonna, known to be of good quality, was injected, and which produced no immediate or subsequent ill effects, the rabbit, at the expiration of seven months, being still alive and well. I relate this that others undertaking any similar researches may select different and more impressive subjects for experiment. It is well known that some medicines, such as strychnine, for example, exert a direct influence upon the spinal marrow and its nerves, acting palpably as stimulants; and it appears probable that belladonna acts conversely, and exerts a sedative influence upon the same division of the nervous system: its efficacy in removing painful and other affections of this important nervous division tend to substantiate this conclusion.

The mode of administering the extract of belladonna is either endermically by the skin, or in the form of pills taken upon the stomach; the constitutional and general effects of the medicine are speedily evinced upon the iris (when applied upon a surface previously blistered and the cuticle removed), in the form of ointment, and in the proportion of one scruple to a drachm of the extract, mixed with one ounce of lard. This mode of application has been found especially useful in cases of sciatica, where the internal administration has been attended with little or no benefit. The extract, when given by the mouth, has been prescribed either at once in the form of pill, or combined with the compound galbanum pill, which has been supposed to render the medicine more extensively diffused over the mucous membrane of the stomach, thus rendering it exposed to a more extended surface for absorption, and by this increasing its energy and activity. The dose has been raised from one quarter of a grain to one

grain, given three times a-day, until the specific effect upon the iris is observed; which is frequently accompanied by slight dizziness, headach, and imperfection of vision, which symptoms preclude its continuance; but in the generality of cases, until the effect upon the iris is palpable, no positive benefit upon the part suffering has been observed. I will now proceed to speak of the individual utility of this medicine in particular affections of the nervous system, and first of all in

NEURALGIA.

This painful affection of the nerves arises from such a variety of causes either acting directly upon some great nervous centre or upon some individual nerve, or reflected upon either of these by irritation of the intestinal canal on some other distant part, that it is not to be expected or supposed that any remedy can become an invariable specific or afford unvarying relief. Obscure as is too frequently the cause productive of this most painful malady, and generally impossible, as it is, to be arrived at by satisfactory evidence in individual cases, the experience of treatment proves that no one remedy constitutes a sure and certain relief for pains of a true neuralgic character; everything apparently being the same, similar remedies are not productive of the same results when administered to different individuals suffering under pains apparently affecting the same nerves and presenting similar characteristics. The preparations of iron, quinine, arsenic; drastic purges, such as croton oil, possess each the power of relieving individual cases; but will any one of these remedies assuage all cases of neuralgia? Certainly not; it is, then, with the hope of adding another to our present powerful assailants against this painful malady that I am induced to recommend to the consideration of our profession another, and, in my own opinion, a very powerful auxiliary. In the present state of our knowledge it appears to be very difficult, if not impossible, to draw a direct inference from symptoms, whether constitutional or general, which shall lead to a positive conclusion as to what remedy shall be most likely to afford relief in individual cases of neuralgia; it is true that when a neuralgic case is evidently depending, from the symptoms and appearance of the patient, upon some anæmic state of the system generally, the local symptoms and pain depending upon this cause, that the sesquioxide of iron will most probably be the selected and the successful remedy; that when neuralgic pains are palpably periodical, and apparently caused by malarious exhalations, quinine or arsenic will afford the desired relief; that when overloading of the intestinal canal has produced irritation and morbid excitement, this reflected upon a distant nerve and productive of neuralgia,—re-

moving the cause by croton oil, will most probably carry the effect with it. But in the majority of cases these obvious causes of suffering do not exist, the pains are clearly present and their cause as plainly wanting; these numerous cases can only be treated empirically; the experience of remedies can alone prove that which has been judiciously selected from a result of that which has been successfully selected and applied. It is not in my power to clear away this difficulty, but as far as my observations have extended I believe that those cases which are accompanied by pains, most truly neuralgic in their character, constitute those which are most beneficially treated by the belladonna. This medicine, also, may readily be conjoined with others, and the combined effects of remedies are not uncommonly more successful than when given separately; a combination of sulphate of iron, or quinine, with the belladonna, has been found effectual, when probably, either medicine taken singly, might have failed. None of these cases so treated will be related, as it is obvious that the effect of any single remedy would not by such means be attained.

The following Cases have been carefully watched and noted by Mr. Sibson, our talented and observant house-surgeon,

and are given in his own words to prevent the possibility of any preconceived views influencing the accuracy and fidelity of the reports; it may nevertheless be asserted that the cases related presented pains which no one could doubt being of a true neuralgic character:—

Out-patient of Dr. J. Calthrop Williams.

M. A. Sands, 21, Mansfield-road, a cheviner, married, has three children. Hair brown; skin soft; susceptible of the influence of cold. She has had a bad supply of food during the last few years. Applied on the 13th of July, complaining of darting pains over the right lower jaw and right temple, over the occipital region, and, to a slight degree, over the left lower jaw. The pain was not constant; sometimes it came on gradually, increasing so as to be very violent; but in general it began suddenly. Generally the pain, after lasting four or five hours, disappeared gradually; sometimes it went suddenly. She took a quarter of a grain of extract of belladonna a-day.

July 28. Has experienced no relief. Take half a grain of the extract of belladonna three times a-day.

29. The pain disappeared last night; she felt as if she were losing her senses; she was giddy; could not stand; felt drowsy; when apparently about to sleep she started suddenly; headach. Continue the pills.

August 7. She took in all about twelve pills. On the 31st she had slight return

of pain in the right temple, it came and went gradually, and lasted about an hour. She has had no return of the pain since that time. Complains of nothing but general debility.

Out-patient of Dr. Davidson.

M. A. Jones, ætat. 29, resides at Carrington, a frame-work knitter. Has had tolerable health, but has been susceptible of the influence of cold. About six months since, after being exposed to cold and wet, she was attacked by cough, attended by copious expectoration. From this attack she gradually recovered.

About the 20th of May, 1843, she was attacked by aching and darting pain in the right temple and right side of the face; the pain came on gradually.

27. She suffers from very severe neuralgic pain of the right temple and cheek. Take half a grain of extract of belladonna three times a-day. Apply the extract over the seat of pain.

29. After she had taken three or four doses of the extract she "trembled inwardly." The pain in the right temple and cheek is much less severe; the pupils are dilated. She took no belladonna on the 29th.

30. Renewed the belladonna; the sight of the right eye became dim and the pupil greatly dilated, followed by dizziness; the neuralgic pain in the right cheek and temple disappeared. She continued the belladonna.

June 21. She became sick, and the dimness of the right eye increased. She then discontinued the belladonna.

26. Has had no return of facial pain; complains of general debility; has leucorrhœa.

August 5. She is still free from pain.

Aug. 9. Mary Brown, ætat. 47, a nurse in the General Hospital. Health generally good; skin susceptible of the influence of cold. During March, 1843, she suffered from darting shooting pain in the left cheek and temple. The pain generally first attacked the left cheek, then the left orbit, ear, and temple; it usually came on suddenly, sometimes gradually; lasted for some hours, and generally disappeared gradually, attacking first one part, then another. After the facial shooting pain had disappeared some hours, a heavy violent pain came on in the occipital region.

Early in May, after she had suffered six weeks from the neuralgic pains just described (which pains increased in severity from day to day), she took half a grain of extract of belladonna three times a-day. The belladonna produced no appreciable effect during the first two days.

On the second night the pain in the occipital region was much alleviated.

On the third morning she felt sick; her
No. 1045.

eyes dim; her throat stiff; she had a dry bad taste in her mouth. She noticed this dry taste in the mouth and throat during the evening of the second day.

On the third day the facial neuralgic pain was much less severe and more continued; less darting in character than on previous occasions.

On the third night she rested unusually well; the occipital pain was less troublesome.

On the fourth day she felt dizzy, sick, and torpid; the pain was still less intense. She now took half a grain of extract twice in the day.

The dizziness gradually diminished; the neuralgic pain became less and less severe every day; and at the end of a fortnight, the pain having disappeared, she ceased to take the extract. The dimness of sight and sense of dryness now disappeared.

After two or three days a slight darting pain came on in the left cheek. She took half a grain of the extract of belladonna daily, for three days, at the end of which time the pain quite disappeared.

She has had a very slight return of pain in the face when she held down her head occasionally, since she left off the belladonna; but she has not thought it worth while to apply for medicine. She attributes the relief from pain altogether to the belladonna.

Out-patient of Dr. J. C. Williams.

John Moore, ætat. 28, Carrington, lace-maker.—A rather pallid man, with light hair and skin, susceptible of the influence of cold. Has been subject to pain in the region of the stomach during the last six or seven years.

May 25, 1843. Has had darting stabbing neuralgic pain in the course of the left supra-orbital nerve during the last three months. Severe pain came on suddenly this morning, after he rose, in the course and distribution of the left supra-orbital nerve, accompanied by dimness of vision; he has no facial pain. Take half a grain of extract of belladonna three times a-day.

26. Has taken the belladonna. There is now no pain in the left supra-orbital nerve; has slight neuralgic pain in the course of the right supra-orbital nerve; sees better; attributes relief to the pills. Continue the extract of belladonna. Apply the extract of belladonna externally over the course of the right supra-orbital nerve.

27. The pain in the supra-orbital nerve disappeared in about half an hour after applying the extract; dizziness and increased dimness of vision came on after a few hours had elapsed; the right pupil is considerably, the left slightly, dilated. Continue the remedies.

29. Took but one pill yesterday; continued the external application. The pain

is more severe in the course of the left supra-orbital nerve. Repeat the extract of belladonna, half a grain, three times a-day. Continue the external application.

31. Has a hot "prickling" taste in his throat; slight irritating cough; dimness of sight; slight dilatation of pupils; smarting and aching of eyes; has *no* darting irregular pain over the left orbit (*the characteristic neuralgic pain having disappeared*); but complains of a heavy regular pain over the whole forehead (*the neuralgic pain being replaced by the dull frontal pain due to the influence of belladonna*). Omit the belladonna.

June 4. Slight frontal pain; has no local neuralgic pain; complains of pain in the lumbar region.

13. Has been free from frontal pain until yesterday morning; as soon as he rose from bed he felt a *heavy aching pain* over the forehead, starting from, and more severe over, the left supra-orbital region; the pain is now worst on the right side; no dizziness; is hoarse. The pain has none of the characters of neuralgia, but to test the influence of belladonna, give half a grain of the extract three times a-day.

14. The headach became worse after taking the belladonna. This is natural, as the pain had the same characters with that produced by the belladonna. Feels parched. Omit the belladonna.

August 8. The frontal pain gradually disappeared; he has been quite free from neuralgic pain until the 6th of August, when he was suddenly attacked by shooting pain over the course of the left supra-orbital nerve. He now suffers from this pain. Take half a grain of extract of belladonna three times a-day.

12. Has taken the pills since the 8th. He felt relief from the first pill; after the second pill the pain disappeared; has had little or no pain since then; throat feels parched.

Out-patient of Dr. Hutchinson.

May 1, 1843. Ann Durrand, ætat. 41. A spare woman, of dark complexion, black hair and eyes; has always been a slave to her employment, that of a shoebinder; her food has been insufficient, and of bad quality; she has never had good health; she has borne seven children; her health has been worse after each childbirth; she has always menstruated regularly; has suffered much from neuralgic pain in the head during the last six months. At first she suffered from a stabbing pain over the left supra-orbital notch; this pain came on suddenly, generally about eleven, a.m., and lasted until about eleven at night, a few hours after being in bed. In about a week the pain extended over the left frontal region, as high as the coronal suture. The neuralgic pain brought on dimness of sight.

May 1. Suffers from intense neuralgia of the left supra-orbital nerve. To take half a grain of extract of belladonna three times a-day.

22. She states that the first pill caused pain in the bowels and purging. She persevered with the pills and took three daily during a week. The neuralgic pain and dimness of sight were gradually relieved; the purging continued. At the end of the week the neuralgic pain and dimness of sight disappeared.

During the second week she took two pills daily; she had then neither neuralgia, pain in the bowels, nor purging.

During the past week she has taken no belladonna.

June 22. She is now free from neuralgic pain; she is less dizzy, and sees better than she did before taking the belladonna.

August 4. She has had no return of neuralgic pain; her general health is much better; she has been in the country and has had better food.

Out-patient of Mr. White.

April 1, 1843. Ann Bell, ætat. 25, lace-mender, resides at Basford, a large, low, damp village, situated on the Leen, a small lime-charged river running on a gravel-bed. Has had general good health, but has had thyrocele for six or seven years, and has suffered from pain in her face, generally on the right, sometimes on the left side, lasting for three or four days, and alternating with epigastric pain of some days' duration. Has light-brown hair; rather fair injectable skin, susceptible of the influence of cold. The pain in the face has usually been preceded by a sense of itching, sometimes singing, in the right ear, followed shortly by sense of itching in the right gums of both upper and lower jaw; in about an hour an aching pain in the course of the portio-dura has supervened, generally ushered in by a sudden stinging pain, often so sharp and severe as to make her jump. This aching pain usually lasted from five to ten minutes, and often recurred, frequently after irregular intervals of perfect relief, lasting from five minutes to an hour. The pain has been less severe when she lay down with her head forward. Catamenia generally regular. Take half a grain of extract of belladonna three times a-day.

History noted on the 23rd of June:— After taking one pill the pain abated and she felt sleepy; after taking six or seven pills her eyes felt dim and misty, objects at a distance being more distinct than those near at hand; the mouth and throat felt dry. The pain became gradually less intense and less frequent in recurrence, and in about three or four weeks the pain ceased. After the 20th of April she took half a grain of extract of belladonna twice a-day. After taking the pills a fortnight the sight

became clear, and in a few days the sense of dryness in the throat and difficulty in swallowing had disappeared. Has occasionally had epigastric pain. She has continued the half grain of belladonna twice a-day up to this date. About a fortnight since had a slight recurrence of pain in the right portio dura; this lasted two or three days. On the 19th of June she became affected by severe epigastric pain. On the 20th she had an attack of pyrosis. The epigastric pain still continues, but she has no neuralgic pain in the face.

August 10. Has been free from neuralgic pain until yesterday morning, when the left upper gums began to itch; after a time she was affected by a heavy aching pain in the left cheek; this lasted until bedtime. She now complains of pain in the left cheek. The epigastric pain has been less severe, and generally absent. Take half a grain of extract of belladonna three times a-day.

12. Suffered from facial pain yesterday; has no neuralgic pain in the cheek to-day; mouth and throat feel dry; pupils are dilated; face flushed; feels "light-headed." The pain went from her face last night, and was replaced by a heavy universal frontal pain. She complains of a darting pain over the left side of the head.

Remarks by Mr. Sibson.

The six cases detailed above were those of out-patients of the General Hospital, near Nottingham. During the treatment they followed their ordinary occupations as far as they were able; they were put under no restrictions as to diet or regimen, and no other medicinal treatment was resorted to save the administration of extract of belladonna. The object was to test the efficacy of belladonna, and to fulfil this object belladonna only was administered. The cases speak for themselves; they are well-marked instances of neuralgia. The characteristic effects of belladonna followed its administration, and in each case the neuralgic pain disappeared after these effects had been produced. I feel satisfied that the relief from neuralgic pain was due to the influence of the belladonna administered. In some cases, as in that of Moore, the influence of belladonna, after removing the local neuralgic pain, has produced a general dull frontal pain; this pain is always ushered in by a sense of dryness in the mouth and throat, dimness of vision, and slight dizziness, the almost invariable effects of belladonna. A little scrutiny will at once distinguish the pain produced by belladonna from neuralgic pain. The unpleasant effects excited by the first few doses of belladonna frequently disappear, although the medicine be persevered in. In no case have permanent bad results followed the administration of belladonna.

FRANCIS SIBSON.

I have just been favoured with the following note and interesting case from Joseph Thompson, Esq., M.R.C.S., consulting-surgeon to the Nottingham Dispensary, &c.:

"Pelham-street, Nottingham,
August 17, 1843.

"My dear Sir,—I have forwarded to you the accompanying case, which is, I believe, illustrative of the good effects of belladonna in neuralgic affections of the face. I must request you will consider that its imperfection depends in some degree upon its being drawn out from memory, dates and prescriptions having been my only guides. However, such as it is, I have much pleasure in transmitting it to you, and as the case is one of a recent date, I will vouch for its accuracy as far it goes. The subject of it is well known to you, and you are aware that he is a gentleman of very close business habits, which confine him within doors. I mention this as it is not hinted at in the account of his case, hoping it may be of some use to you in your inquiries into the action of belladonna. I am, dear Sir, yours truly,

"JOSEPH THOMPSON.

"To Dr. Hutchinson."

"B. M., ætat. 37, consulted me on 11th January, 1843, on account of pain which he experienced in the right side of his face and in the molar teeth. The pain was at this time comparatively trifling, being confined to the lower part of the temple to a point opposite the articulation of the lower jaw with the temporal bone, and extending thence to the angle of the jaw and the molares; leading at first to the supposition that it might arise from a decayed tooth. This, however, was clearly not the case; the bowels were, too, inactive, and the tongue furred, with other evidences of a deranged state of the digestive organs, which had probably existed a considerable time. From this it was supposed that the pain, which was evidently seated in the inferior maxillary nerve, was derived, and consequently it was judged proper to recommend an abstemious and otherwise appropriate plan of diet; and an emetic, to be followed by a calomel pill and cathartic draught, and afterwards a mixture composed of ammonio-tartrate of iron, tincture of henbane, sal volatile, and infusion of calumba. From this period to the 17th he took several purgatives, and continued his plan of diet and medicine without any relief, indeed, his pain had rather increased; he was therefore recommended to use, in addition to the remedies already in use, an application composed of soap liniment and extract of belladonna. On the 21st he had received no benefit, and as, notwithstanding the free purgation, his tongue continued furred, &c., it occurred to me that the tonic might have been prematurely recommended,

and that it would be better to omit it and attend only to the digestive and secreting organs, &c., and when some evident improvement had taken place in this respect to return to it. With this view he was desired to continue on the same diet, and to take occasional aperients, preceded by small doses of calomel, and an effervescent saline with hydrocyanic acid. This he did until the 31st, when the pain was so distressing that I was obliged to prescribe him an opiate, containing twenty-five minims of liquor opii sedativus, to be taken at bedtime; at this time the pain had become exceedingly severe, shooting with great violence along all the branches of the inferior maxillary nerve, and affecting all the lower teeth as far as the interval between the two middle incisors. On the 1st of February he was requested to repeat the anodyne draught at night, and to take an ounce and a half of mixture composed of twenty grains of disulphate of quinine, one drachm of magnesia, three drachms of tincture of orange-peel, and eight ounces of water. This he continued, with occasional aperients, until the 8th, when, having experienced no relief, it was changed for eight grains of compound extract of colocynth and two of calomel every night, and five minims of liquor arsenicalis three times a-day, which was soon increased to ten. He persevered with this medicine until the 17th, and no amendment having resulted, he got half a drachm (which was speedily increased to half an ounce) of carbonate of iron, with three grains of disulphate of quinine, to be taken every four hours. This, together with the aperient pills, an occasional aperient and anodyne draught, produced so much relief that I had every reason to believe he would soon be quite well, the pain being nearly gone by about the 15th of March. Without my advice he left his house and went to business, and on the 17th the pain returned with more violence than ever. Ten grains of compound extract of colocynth were ordered to be taken at bedtime, and the liquor arsenicalis was again had recourse to in combination with spirits of lavender and tincture of cinchona; but he only took this until the 19th, as he wished to return to the iron, which had been of such signal service to him. On this occasion, although he took it in the same large doses as before, up to the 26th, it produced not the least benefit; on this day I prescribed for him a quarter of a grain of extract of belladonna and half a grain of extract of henbane, three times a-day, and to resume the use of the arsenic (which had been relinquished in compliance with his wishes), as I thought it had scarcely had a fair trial, and my intention was to continue it for a fortnight, gradually increasing the dose. For this evening I also ordered him one grain of the muriate of morphia in a draught. No amelioration having arisen

out of this treatment, the late Dr. Davidson was requested to meet me, which he did on the 29th, and he recommended a continuance of the arsenic, in doses of twelve minims (every six hours), combined with forty minims of liquor potassæ, and an ounce and a half of almond emulsion; he also directed a solution of extract of belladonna in spirits of wine, to be applied (by means of lint) over the face, and a repetition of the pills with extract of belladonna and the anodyne draught. We met again on the 2nd of April, when we found our patient complaining of sickness and thirst, and as we had some reason to think this might be occasioned by the draught, we prescribed an effervescent saline with hydrocyanic acid to be taken after each, and the pills and liniment to be continued. It is proper to mention that at this time the pain was so violent that he could rest neither night nor day; his tongue was covered with a whitish slimy fur, and the lips particularly; the lower one was swollen and cracked, and the side of the chin actually excoriated from the friction of his handkerchief which he was obliged to press upon the parts every time he had a dart of pain. His diet had consisted chiefly of good broths, sago, gruel, arrow-root, and sago pudding, &c., and at this time it would have been utterly impossible for him to masticate solid food; talking even would bring or aggravate the pain when present. Our next meeting was on the 7th, when the above state of things persisting, we recommended first an emetic, and then a drop of creosote, every six hours, and all other medicines to be discontinued. On the 8th the pain was unalleviated, and as we were averse to the administration of opium by the mouth we gave one drachm in mucilage as an enema. Dr. Davidson again met me on the 9th, and we agreed to give ten grains of calomel and twenty of Dover's powder directly, and one-fourth part of a mixture containing sulphate of magnesia, fluid magnesia, and tincture of colchicum, every four hours, until the bowels acted copiously, and then one grain of extract of belladonna and two of extract of henbane, every four or six hours, according as the pain should be more or less violent. On the 10th, the belladonna was increased to two grains every four hours, the henbane being omitted; on this day he was also ordered to take with each pill one drachm of bicarbonate of potass and five grains of iodide of potassium in the form of mixture, and in the morning an opening draught, consisting of spirits of turpentine and castor oil, of each half an ounce. On the 12th the pills, mixture, and draught were repeated, and some zinc ointment ordered for the lip. He now began to experience considerable relief from pain. On the 16th the pain was gone, except an occasional twinge. Bowels torpid, and as he had taken calomel for some time with his pills, the bromide of potassium

was prescribed in doses of three grains, to be taken every night, with five grains of compound extract of colocynth and an aperient dose in the morning, consisting of compound powder of jalap and tincture of senna and water. The above plan was continued up to the 20th, the pills having been given at longer intervals, and a chloride of soda gargle prescribed for the mouth on the 18th. On the 20th he had ordered for him a light tonic of compound infusion of gentian, sal volatile, and tincture of orange-peel, and was directed to take a pill only when threatened with pain. He went to Scarborough about the 30th of March, and when he left home he was free from all pain; but yet was not satisfied to travel without his remedies lest he should have a relapse. I have lately heard that on the night previous to his leaving home he took a pill, thinking it would enable him to travel better, and more secure from pain, but not having taken one for some nights, and being free from pain when it was taken, the next morning he was so much affected with tremors and otherwise ill that he was obliged to take some brandy and water before the symptoms disappeared.

"J. T."

The next communication will consist of observations and cases showing the curative influence of belladonna in cases of sciatica and cruralgia.

Nottingham, Aug. 12, 1843.

HÆMORRHAGE FROM THE PROSTATE GLAND.

TREAT it as an internal hæmorrhage, or as you would a woman threatened with miscarriage. Avoid using the catheter if possible. When you do use it you will find it stopped up with coagulum, and you will have to inject a very little tepid water before you will be able to relieve the bladder either of blood or urine. As the urine flows into the bladder the coagulum dissolves, and the urine is for a long time charged with blood. At length it is clear, and the patient remains well until a shock in riding, or a plethora of the gland, causes the veins to burst again.—*Sir Charles Bell.*

SHOULD a wound in a distant part of the body co-exist in the same patient with a chancre of the genitals, the wound will proceed to cicatrisation, as if no syphilitic complication were present, *provided* the secretion of the chancre do not come into contact with it. But a wound existing close to the chancre, as within one or two lines of it, will become chancrous, although no apparent contact with the inoculable matter should have previously taken place. This may, perhaps, be due to the virulent secretion soaking, as it were, through the neighbouring cellular tissue; but whatever be the explanation the fact is one daily observed, and which cannot be contradicted.—*Ricord.*

PERFORATING ULCERS OF THE STOMACH IN THE MALE AND IN THE FEMALE.

To the Editor of THE LANCET.

SIR,—In December, 1837, a case of perforating ulcer of the stomach having occurred in my practice, I was led to an investigation of such instances of this affection as I could find on record. The result of that investigation was a conviction on my mind that these cases, so remarkably similar in the previous state of health, in the age, and in the sex of the several patients, so uniform, also, in the situation and character of the ulcer, must be traceable to one common cause; that cause I believed to exist in sympathetic irritation of the stomach from uterine disorder.

All the cases of this disease recorded as having occurred in the *male* subject are so totally distinct in the previous state of health of the patients, so remarkably differing in the situation and character of the ulceration, as compared with the *female* cases, as to distinguish them entirely from these latter, and to afford additional proof that the perforating ulcer in the female is a disease, *sui generis*, peculiar to the sex, and arising from some uniform cause. The proportion of cases, also, is as seven in the female to one in the male sex.

In May, 1838, I published these views in a pamphlet, entitled "Practical Observations on Hysteria," and since that time I have collected much additional matter confirmative thereof; in fact, I had but a few days ago finished a tabular arrangement of cases, with a view to publication, when THE LANCET of August 5th came into my hands, containing a paper on the subject by Mr. Crisp, who it appears has arrived at the same conclusions as those to which I have referred in my pamphlet of 1838. Mr. Crisp has made out a tabular view of numerous cases of this disease, which, when added to, and compared with, that which I had also arranged, places the whole subject, as I think, in a clear and simple light. In being the first to arrive at a just conclusion with respect to a class of diseases involved (as a perusal of all the discussions on the subject for many years past will show) in great obscurity, there may be but little merit, but *cuique suum* is a motto in which I am sure Mr. Crisp will cordially agree, and I doubt not that the same feeling will induce the editor of THE LANCET to give a space to these remarks in an early number of his valuable periodical, and thus greatly to oblige his obedient servant,

JOHN PRICHARD.

Leamington, Aug. 31 1843.

P. S.—Since the above letter was written and forwarded to the editor of THE LANCET,