so long as sanitary precautions are neglected. The English residents protested against the treatment to which they are being subjected on account of the sanitary cordon existing in Hasskeni, and have memorialised the British Ambassador, who has represented the matter to the Ottoman Government; but, so far as we are able to judge, without the desired effect. However, Sir Henry Elliot, in a letter to the *Levant Times*, states that the latest accounts which he had received gave grounds for hoping that cholera is fast subsiding. The Ambassador appears to have done what he could to help the English. He has directed medical assistance to be afforded to the sufferers, and has made arrangements for an English sister of charity to go to Hasskeni and afford help to those who are willing to receive it.

It would be satisfactory if we could record as a fact that the Turkish authorities had done away with the cordon, against which such loud complaints have been raised. The cordon is quite useless if, as is stated, the authorities have neglected the most ordinary sanitary precautions. The paper before referred to shows that Hasskeni in the middle of last month was fouled to an extent which is sickening to read of.

CONSTANTINOPLE.

The deaths from cholera were as follows on the several days from Oct. 9th to Oct. 29th—viz.: 24, 14, 12, 14, 10, 19, 46, 37, 38, 34, 20, 24, 37, 64, 53, 30, 29, 25, 51, 27, 46. The latest accounts report an increase again in the cholera.

ST. PETERSBURG.

On Oct. 19th there were 16 cases under treatment.

	Cases.	Recoveries.	Deaths.
Oct. 19th	3	2	1
„ 20th	—	—	1
„ 21st	1	2	2
„ 22nd	1	1	1
„ 23rd	2	2	—
„ 24th	1	3	—
„ 26th	4	—	—
„ 28th	1	2	—
„ 29th	2	1	—

HELSINGFORS.

Week ending Oct. 9th: 18 attacks; 15 deaths. Oct. 14th: 10 attacks; 3 deaths. Oct. 15th to 18th: 2 attacks; 1 death. Total cases since the beginning of the epidemic, 300. Total deaths, 165.

Correspondence.

“Audi alteram partem.”

THE DISCOVERER OF THE FUNCTION OF VASO-MOTOR NERVES.

To the Editor of THE LANCET.

SIR,—My attention has recently been called to a statement of mine in my article on “The Process of Inflammation” in “Holmes’s Surgery,” relating to vaso-motor nerves, in which I have unintentionally failed to do justice to the distinguished physiologist who first gave the true explanation of their functions.

It is well known that Claude Bernard was the first to show the effects produced by section of the cervical sympathetic on one side in producing increase of temperature and hyperæmia of the same side of the head. But Bernard did not infer therefrom that the reason why section of that nerve produces hyperæmia is that it contains efferent nerve-fibres which stand in the same relation to the muscular walls of the arteries that the motor nerves stand to the muscles, and, consequently, did not, as we now do, regard the phenomena in question as a result of vascular paralysis. He taught that the primary effect of section was to increase the vital activity of the part, and that the increased vital activity determined a correspondingly increased afflux of blood. In like manner he explained the effect of electrical excitation of the cervical sympathetic to be due to an altered state of nutrition in the parts to which the nerves are distributed—not to an active contraction of the vascular walls.

The same summer that Bernard demonstrated the fact to his class in Paris, Brown-Séquard published in an American journal the true explanation of it. Dr. Brown-Séquard wrote as follows:—

“I have found that the remarkable phenomena which follow the section of the cervical portion of the sympathetic are mere consequences of the paralysis, and therefore of the dilatation, of the bloodvessels. The blood finds a larger way than usual—arrives in greater quantity; therefore the nutrition is more active. As to the elevation of temperature, I have seen, as Dr. Bernard has, that the ear exhibits from 1 to 2 degrees (Fahrenheit) more than the rectum; but it must be remarked that the temperature of the rectum is a little lower than that of the blood, and, as the ear is full of blood, it is very easy to understand why it has the temperature of the blood.

“A great many facts prove that the degree of temperature and sensibility of a part is in close relation with the quantity of blood circulating in that part.

“I base my opinion in part on the following experiment. If galvanism is applied to the superior portion of the sympathetic after it has been cut in the neck, the vessels of the face and of the ear after a certain time begin to contract. Their contraction increases slowly, but at last it is evident that they have resumed their normal condition, if they are not even smaller.....When the galvanic current ceases to act, the vessels begin to dilate again, and all the phenomena described by Claude Bernard reappear.”

In a foot-note Dr. Brown-Séquard says:—“My experiments prove also that the bloodvessels are contractile, and that the nerves are able to put them in action.....Some experiments which I intend to perform again appear to prove that the same parts of the spinal cord which give origin to some of the motor fibres of the iris originate also the motor nerve-fibres going from the cervical sympathetic to the vessels of the head.” (Reprint from the *Philadelphia Medical Examiner* of August, 1852; *Edinburgh Medical Journal*, vol. xvi., p. 58.)

From the above passages it is clear that in 1852 Brown-Séquard had not only observed the vascular dilatation which results from the section of the cervical sympathetic, and the contraction produced by excitation of the peripheral end, but had given the explanation of those phenomena which later experiments have proved to be the correct one; and that he regarded the increase of temperature and the local changes in Bernard’s experiment as a consequence, not a cause, of the vascular dilatation. It also appears that he was aware of the fact that vascular nerves are, as regards their origin, spinal. There can, therefore, be no doubt that Brown-Séquard is entitled to be regarded not merely as the first promulgator, but as the author, of the modern doctrine of vaso-motor action.

I am, Sir, your obedient servant,

November, 1871.

J. BURDON-SANDERSON.

ON THE REMOVAL OF GROWTHS FROM THE LARYNX.

To the Editor of THE LANCET.

SIR,—Having been, unfortunately, absent from the meeting of the Royal Medical and Chirurgical Society when Mr. Durham’s interesting paper was read, I trust that you will kindly allow me space to vindicate my position.

In replying to Mr. Durham’s strictures I labour under great difficulty, inasmuch as I understand that many statements were made by him which do not appear in the abstract, but in my present communication I must necessarily confine myself to the matter as placed before the profession in your journal.

It might be supposed from Mr. Durham’s article that I objected to the operation of thyrotomy *in toto*; but this is not at all the case, as may be seen by reference to pages 84, 86, 89, 90, and 91 of my essay on Growths in the Larynx.

Those who refer to my work will see that the difference between us is, after all, not so great as would appear; but whilst, as far as I can gather, Mr. Durham seems to think that external operations on the larynx are indicated where it is not practicable to remove the growths through the mouth, I, on the other hand, consider it “a cardinal law, that an extra-laryngeal method ought never to be attempted

(even where laryngoscopic treatment cannot be pursued) *unless there be danger to life from suffocation or dysphagia.*"

To enter into more detail in considering the relative merits of thyrotomy and laryngoscopic treatment, I have dwelt upon three features: 1st, danger to life; 2nd, recovery of voice; 3rd, chances of recurrence; and Mr. Durham has now introduced a fourth element for discussion, the comparative difficulty of the operations.

1st. *Danger to life.*—Of the 28 cases tabulated by me, 9 terminated fatally within two years. Mr. Durham takes exception to 6 of these because they were cases of cancer, and those who have not read my book might suppose that I had suppressed this fact. Exactly the reverse is the case, for I have taken the greatest pains to give prominence to it at pages 94 and 97, and also both at the head and foot of my thyrotomy table. Subtracting these six cases, however, giving Mr. Durham the benefit of one other case which is in dispute between us, and adding his six successful cases, there remain two deaths as the result of 27 operations; or, in other words, there is a mortality of about 7 per cent. On the other hand, I am not aware that there exists a single case on record in which death has resulted from the removal of a growth *per vias naturales*.

2nd. *Recovery of voice.*—According to Mr. Durham's own statement, of 37 cases which he has collected, the natural voice was regained in only about half the cases; whilst of 93 published cases which I have treated laryngoscopically, the voice was completely restored in three-fourths of the cases.

3rd. *Chances of recurrence.*—On this subject, Mr. Durham has given no statistical information whatever, but has simply begged the question by stating "that the more completely the original growth was removed, the less would be the probability of its re-appearance," and "that such complete extirpation could be more certainly effected in most cases after section of the thyroid cartilages, than by any method practised through the mouth." The truth of the first proposition is self-evident, but that of the second is not borne out by the facts. Of 27 non-malignant cases (including Mr. Durham's 5 cases), the growth could not be extirpated at all in one, and in two the neoplasm was incompletely removed. Death took place in 4 cases before time was given for recurrence. There remain therefore 20 cases; in these, recurrence took place in 3, or in 15 per cent. In my 93 cases treated through the fauces, recurrence took place in only 6 cases, in which the growth had been completely extirpated—that is, in about 6½ per cent.

4th. *Comparative difficulty of the operations.*—I quite admit that it is easier for a novice, who has never tried either method, to remove a growth by section of the laryngeal cartilages, than to do so with the aid of the laryngoscope; but I have yet to learn that an operation is to be recommended in proportion to the facility with which it can be executed. There is, however, at least one case on record in which, thyrotomy having been attempted, the growth was subsequently removed *per vias naturales*.

I do not, however, at all agree with Mr. Durham's remark, "that in very few, if any, of the cases in which the larynx was opened, would it have been practicable to remove the growths through the mouth;" but it would obviously be invidious to particularise cases in reference to this point. In conclusion, I must express my extreme regret that I quite inadvertently omitted to include, in the thyrotomy-table of my essay, Mr. Durham's case, contained in Guy's Hospital Reports, 3rd Series, vol. xii. This omission certainly would not have occurred but that Mr. Durham's valuable contribution to Holmes's System of Surgery only reached me after the first proof sheets of my work had appeared. I subsequently made some alterations in order to acknowledge Mr. Durham's important labours, and I am only sorry that at that period I did not do complete justice to his admirable article.

Yours faithfully,

November 28th, 1871.

MORELL MACKENZIE.

P.S.—The case in dispute between Mr. Durham and myself is that of Brauers. The facts of the case are as follows:—In the year 1833, Brauers of Louvain divided the thyroid cartilage of a patient suffering from growth in the larynx. The case was published by Ehrmann, who thus terminates his report: "Le larynx passa à l'état d'induration squirreuse; une fièvre hectique s'alluma; elle devait amener nécessairement la mort, quoique cette dernière ne fût pas encore arrivée à l'époque où le médecin, rapporteur de ce

fait, nous en fit le récit à Bonn." This is the report published by Ehrmann, seventeen years after the event. It must be borne in mind that not only was Ehrmann justly considered the greatest authority on laryngeal diseases throughout the whole of Europe, but also that he had a decided bias in favour of thyrotomy. It is highly improbable, therefore, that had the patient survived he would have obtained evidence on the point. Krishaber, however, writing in 1868 (Dict. Encyc. des Sciences Méd., p. 762), asserts, without any authority whatever, that the patient survived the operation twenty years; and although the statement has since been quoted by Dr. Planchon and Mr. Durham, I fail to see that this reiteration increases its accuracy.

THE PROFESSION IN SPAIN.

To the Editor of THE LANCET.

SIR,—Having read in your issue of October 14th an article with the above heading, taken from the *Cornhill Magazine*, I should be obliged if you would allow me to correct, on behalf of the medical profession to which I belong, what there is inexact in that article, for I believe the writer of it can know but very little of this country and the present state of surgical science here.

It is long since the Church in this country interfered with regard to public teaching, even of anatomy. In almost all the universities of Spain there is a sufficient number of human subjects, not only for the medical students, but also for the professors who wish to cultivate anatomy or practise surgical operations. With regard to the supposition that only the medical men who have studied at Montpellier or Paris are the few really accomplished practitioners, I have to say that we have in Spain a great number of medical men who have studied at our own schools, and whose scientific attainments are not inferior to those of the most celebrated professors of other countries.

Doubtless the writer in the *Cornhill Magazine* is quite ignorant that such men and professors as Piquer, Meredia, Argumosa, Vaiela de Montes, Drument, Castello y Serra, Fourquet, &c., authors of surgical, anatomical, and obstetrical treatises, whose names will never be forgotten in the annals of medical science in this country, were born, educated, and practised in Spain. At present Spanish universities have a staff of first-rate professors, well known not only in their own country but abroad, such as Sanchez Foca, Calvo Martin, Olivares, Creux, Mata, Santero, Saura, Alonso, Velasco, Diaz Benito, Cervera, and so many others from Madrid, Barcelona, Cadiz, Santiago, Valladolid, and several other cities in Spain, authors of different works which are used in the universities, and whose museums are seen with pleasure by the learned. This I consider enough to enable any sensible person to understand that erysipelas and facial neuralgia are not charmed away by crossings, and that the doctors in the hospitals don't discharge their patients with legs badly set and sores still sloughing. Nor is it true that priests try to convert foreigners in the way he describes, as there are at present very few hospitals directed by clergymen. These establishments are first-rate in general attendance, food, and everything necessary. In this town, with only 30,000 inhabitants, there are three hospitals, two civil and one military.

In answer to the other two paragraphs, I must say I can't believe that the Spanish doctors have fled from any epidemic, for they are considered to be as charitable and as brave as any in the world. In the course of my practice I have seen some epidemics, and never yet saw a physician abandon his patients or the infected town. Neither can I believe that they have persecuted any English doctor; if such a thing ever happened, it will have been owing to the infraction of the laws of this country, to which every foreigner that settles here is bound to submit.

Spain, Sir, is not a backward nation; the learning that is so rapidly extending over the world reaches us also, and the learned here are quite up to the European scientific standard. If hygienical rules are not so widely practised among us, the economical state of the country must be blamed and not the people, because they are not in want of the necessary knowledge to put them in practice.

I remain, Sir, yours respectfully,

Corunna, October 25th, 1871.

DR. DESIDERIO VAIELA.