Dr. Graily Hewitt, speaking of the os uteri in women who have borne children, says "the aperture may be so large as to admit one or two fingers." Now I believe this to be an error, if it is meant that such a condition is compatible with a thoroughly healthy cervix and uterus. I do not deny that such may very exceptionally be the case; but I assert without hesitation that nineteen times out of twenty such a state of the os uteri means disease, and ought to lead us to make a careful examination with a large bivalve speculum. Such an examination will usually reveal a very diseased state of the mucous membrane lining the cervical canal of the open os. An open os is one of my most trusted guides and sanctions when I wish to decide whether more than a digital examination is justified and required.

I am, Sir, your obedient servant, J. HENRY BENNET, M.D.

Grosvenor-street, May 18th, 1871.

## DEFECT OF HEARING IN DIPHTHERIAL PARALYSIS.

#### To the Editor of THE LANCET.

SIR,-The important case mentioned by Dr. James Thompson (THE LANCET, May 13th) interests me so much that I write to ask him to state the interval, if any, betwixt the cessation of the local diphtheritic process and the onset of the diphtheritic paralysis. Dr. Greenhow believes that the slight defect of hearing in his patient was the result of an affection of the Eustachian tube, and this opinion from him deserves very careful consideration. If, however, the defect of hearing comes on some time after the diphtheritic inflammation has ceased, another hypothesis as to its causation may be held. It is admitted that the defect of sight is owing to palsy of the ciliary muscle, and I suggest that the slight defect of hearing may be owing to palsy of the tensor tympani. I say nothing of the stapedius, as this muscle comes off from the trunk of the portio dura nerve, and is not supplied by a ganglion; the ciliary muscle and the palate, the parts first and most affected in diphtheritic

paralysis, are supplied by ganglia. Theoretically, we should expect some deafness to occur from palsy of the palate alone, as the paralysed tensor and levator palati will not be able to open the Eustachian tube. According to Von Troeltsch, the tensor opens, and the levator closes, this tube.)

Trousseau, in his Lectures (vol. ii., New Sydenham Society's translation, by Dr. Rose Cormack), speaking of diphtheritic paralysis, says, "The senses of smell, taste, and hearing are affected in some cases, but the affection of special sensation which is most commonly met with is dim-ness of vision."

In cases of diphtheritic palsy, affections of hearing should be inquired for, as probably the defect will be but slight. Indeed, Dr. Greenhow says that in most cases hearing is not sensibly affected. If we may judge by the conditions causing the defect of sight, the accommodating apparatus of the ear, and not the auditory nerve, will be at fault. However slight or transient the defect may be, it is important to note it carefully when it occurs, as being one symptom of a very remarkable series.

I am, &c.,

J. HUGHLINGS JACKSON. Bedford-place, May, 1871.

# SPECTRUM ANALYSIS OF BLOOD-STAINS. To the Editor of THE LANCET.

SIR,-From time to time I have made a large number of examinations of blood-stains of all kinds and ages, and have been led to regard their detection by the microspectroscope as a method of marvellous delicacy and unquestionable certainty. I cannot therefore but regret, especially at the present time, that any doubt should be expressed in the pages of THE LANCET respecting this method of research. The bands produced by blood are not "a little dimness," but are as distinct, as certain, and as well marked as the bright lines produced by various burning materials; and, what is more, the definite position of the bands is as certain as the definite position of the bright

Mr. Sorby has examined hundreds of substances, lines. and asserts that no substance with which he is acquainted produces bands similar to those produced by blood. I have repeated most of his experiments with the same conclusions. I must say that, in my humble judgment, the detection of blood by the spectroscope is as positively certain as I can conceive any method of analysis to be.

I am, Sir, your obedient servant, C. MEYMOTT TIDY, M.B., Joint Lecturer on Chemistry and Medical Jurisprudence at the London Hospital. Cambridge-heath, Hackney, May 22nd, 1871.

 $*_*$  The question is purely one of observation and fact. We think that if our readers will first look at the lithium line or the sodium lines, and then at the blood spectrum, they will be amused with our correspondent's statement that the blood-bands are "as distinct, as certain, and as well marked as the bright lines produced by various burning materials."-ED. L.

### ON THE ACTION OF LIGHT IN SMALL-POX. To the Editor of THE LANCET.

SIR,-Dr. A. L. Carroll, in his letter in your issue of May 13th, brings forward instances which he believes are in opposition to the conclusions at which I have arrived, as stated in the articles you have done me the honour of publishing.

Passing over the circumstance that Weber's æsthesiometer is not a pair of compasses, as he has kindly reminded me, I must say the examples he has mentioned do not, I conceive, refute my hypothesis. The tip of the tongue is, no doubt, very sensitive, covered as it is with mucous membrane peculiarly adapted by nature to detect tactile impressions, but not being part of the skin, I have con-sidered it an exception, and altogether foreign to my The plantar surface of the foot is generally in subject. the dark, and is also very sensitive; but there is more or less constantly a determination of blood to this surface, due to the friction and pressure to which it is subjected. If Dr. Carroll will read my second paper in THE LANCET of April 22nd, he will see that there I have, as I think, explained this more fully than I can do in a letter.

In the articles I have written I have tried to avoid any detailed account of facts generally known to the profession, so as not to encroach on the valuable space in your journal unnecessarily, and have, perhaps, been dogmatic in my expressions upon subjects which of course as yet are uncertain. Rules have been the bases of my arguments, and the exceptions I have not mentioned, but I beg Dr. Carroll to believe I have not overlooked them.

I am, Sir, yours obediently, 1871. J. H. WATERS, M.B. Jermyn-street, W., May 16th, 1871.

# VIENNA.

(FROM OUR OWN CORRESPONDENT.)

THE sanitary state of this city is at present very unsatisfactory. Since the middle of February, when the Danube overflowed the low-lying districts near the Prater, there have been a great many cases of typhoid fever in the inundated parishes, and the disease has, at the present time, reached epidemic proportions. Thus, from the 20th to the 25th of April, 81 new cases are recorded, while 321 remained under treatment from previous weeks. From the 26th of April to the 2nd of May, 106 new cases occurred, and 348 old patients were still being treated. The mortality appears to have slightly diminished. Thus, the deaths in the week ending April 23rd were 33 in number; in that ending April 30th, 28. For the week ending May 6th, the deaths, excluding those of children in the Foundling and Lying-in Hospitals, numbered 514 persons, against 473 in the preceding week. Of these 172 died in the various hospitals. The following figures show the increase in the number of deaths occurring from the diseases named :- Typhus and typhoid,\* from 28 to 47;

\* Given together as "typhus."