is no history of syphilis, but I thought it worth while to give him iodide of potassium for a time. The journalist suggests that my treatment caused him to lose all his teeth. I never gave him mercury and the teeth he lost were some removed by the dentist because they were in contact with the ulcer. The gums were very unhealthy. While Mr. A. was under the iodide the lady journalist urged him to go to Mr. E. A. Cloete Smith for high frequency current treatment, and she insinuates that I perversely told him to go to a member of the staff of my own hospital. I did nothing of the kind. The patient thought the name recommended was Mr. Curtis Smith, and as I know no such person I told him to go to Dr. F. Harrison Low, who has never been a hospital colleague of mine. She states that the x rays were used by Dr. Low to the great injury of the patient, causing the ulcer to slough, &c. In truth, the x rays caused a great improvement in the general condition of the mouth, cleaned the surface of the ulcer and softened its base, but did not diminish its size until the moment arrived when the journalist persuaded the patient to leave Dr. Low for Mr. Cloete Smith. I saw Mr. A. a fortnight ago. The ulcer is now smaller, especially in the long diameter, which now measures only half an inch as against four-fifths originally. The patient is in good health and spirits. I said to him, "If I were you I should have the x rays used to this sore occasionally." Mr. A. replied: "Oh yes, Mr. Cloete Smith does use the x rays to it occasionally." So it appears that the despised x rays have not been discarded altogether in favour of the high frequency current.

I need not add that it is not certain that this ulcer is carcinomatous. Not every ulceration of the mouth which complicates leukoplakia is malignant. Nevertheless, this ulcer had quite sufficient clinical signs of malignancy and I have no wish to deprive either the x rays or the high frequency current of any credit due to them. I believe this ulcer was malignant in character, but peculiarly favourable for such treatment as can be given by electricity or light or other ways, owing to its small size and unusually thin base.

I am, Sirs, yours faithfully,

Grosvenor-street, W., April 23th, 1903.

C. B. KEETLEY.

FREE ANTITOXIN.

To the Editors of THE LANCET.

SIRS,—It is now nearly six years since the then vestry of Camberwell established the first laboratory of municipal bacteriology in the United Kingdom; and to me, as the first official appointed to the charge of such a department of sanitary work, it is a matter of both interest and amusement to note how from time to time the credit of priority in this or that branch of the work is claimed for one or other sanitary authority. We began, for instance, with the free distribution of diphtheria antitoxin which has been recently claimed in your columns by Hanley—a claim subsequently sought to be set aside in favour of Guernsey, though we made it a plank in our platform at the very start.

Latterly the Local Government Board auditors have been disallowing antitoxin items, but with the help of my brother, Mr. W. R. Bousfield, M.P., and of Dr. T. J. Macnamara, M.P., I have succeeded in obtaining from the President of the Board his sanction to the continuance of the supply—at all events for the present.

I am, Sirs, yours faithfully,

EDWARD C. BOUSFIELD, D.P.H. Camb. and Lond.,

Bacteriologist to the Borough of Camberwell.

Old Kent-road, S.E., April 27th, 1903.

OPERATION IN SUPPURATIVE DISEASES OF THE EAR.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of April 25th, p. 1197, there appears a letter on the above subject by Mr. F. Faulder White in which it is said: "But we are to swallow the camel in the five-hour operation of Mr. Ballance and at the same time to reject the gnat in the common-sense and often absolutely necessary minor operation of ten minutes' duration." The rebuke contained in the well-known verse from Holy Writ (Matthew xxiii. 24) has no sort of application to the matter at issue and the passage is, moreover, inaccurately cited. What specially struck me, however, in the sentence of Mr. White was the expression, "the five-hour operation of Mr. Ballance." The operation recommended by Mr. Ballance has not taken five hours to execute when I have seen it done.

If Mr. White really thinks that it does occupy five hours in execution he can never have seen the radical mastoid operation performed by a competent operator.

I am, Sirs, yours faithfully,

April 27th, 1903.

CHARLES D. GREEN.

THE STUDY OF VENTILATION.

To the Editors of THE LANCET.

SIRS,—It is now more than 48 years ago since I dropped my first communication to you in the Editor's letter-box. It was done at midnight with much doubt and diffidence. It was a report with remarks on a case of wound of the pericardium and heart substance which had recently been admitted into University College Hospital under the care of the late Sir John Erichsen, whose house surgeon I was at the time. To my surprise and delight you published my poor essay *verbatim*.

I now venture to intrude on you on the great subject of hygiene. From the year 1846 to 1852 I was a constant attendant on the House of Commons as one of the ventilation staff. My late father's vacuum system was alone in use in the temporary House, the combined vacuum and plenum movements being in the present House. I thus early became acquainted with practical methods of ventilation. Shortly after having been appointed to the sole professional charge of the Geelong Hospital (200 beds) I became aware of the fact that anyone, rich or poor, could at any time demand attention for a scratch but that there was no provision for the reception of infectious cases. Many a poor woman was sent away with her child suffering from measles or scarlet fever and refused admission. Indeed, the rules distinctly refused to take in such cases and the afflicted one had to be taken home there to spread the disease. Shortly after the visit of the late Duke of Saxe-Coburg (then Duke of Edinburgh) to Geelong the mayor of the town proposed that the visit should be marked by the erection of an Alfred memorial ward in the extensive grounds of the hospital. Believing that the mayor and I were anxious on the same question I immediately sent him my contribution. The mayor, however, was far more interested to provide a suitable abode for lunatics on remand instead of sending them to gaol, while the committee of the hospital had an idea of housing old and incapable women now accumulating in the hospital. Subscriptions coming in freely it was resolved to combine the three schemes in one building separate from the general hospital but in its grounds. The south end was to be appropriated to supposed lunatics, the north end to elderly and incurable women, while the centre was to be laid out as fever wards (male and female) and necessary annexes. Architects were employed and there was no difficulty in the old women's ward nor in the accommodation for lunatics, but the word ventilation in connexion with my idea raised a storm and its source was singular. It originated with a burning and zealous follower of John Knox, who believed only in God's air which naturally came through doors and windows. Air coming up in vast quantities without draught from a properly prepared chamber was rather to be considered as "blasts from h—l" than as "airs from heaven." He was frantically opposed to my scheme and so also, but in a less loud manner, was the Episcopalian minister. They had their followers. I had a glass model prepared about five feet long of a large ward ventilated on the vacuum system, the motive power being a strong spirit lamp placed rather higher than the ceiling and at the foot of a glass chimney. Smoke was used to illustrate air movements. (I had seen Her late Majesty Queen Victoria with Prince Albert and accompanied by King Louis Philippe, Queen Marie Amélie, and Princess Clémentine looking at the working of a similar model in my father's experimental room while listening to his explanations.) My model prevailed. I showed that it was next to impossible for air to escape from the fever wards without passing through fire, thus rendering it free from all germs and destroying all chance of contagion spreading abroad. The building was made and the ventilation proved a success. Four severe epidemics of scarlet fever, measles, diphtheria, and typhoid fever severely tried it. Not only were all the beds filled but stretchers had to be placed between them and some were accommodated on the floor. I kept up an abundant supply of fresh air and kept the fire in the shaft going rather furiously night and day. The mortality was notably less than usual. Not one case of contagion was noted after years of experience.

I notice that the most ignorant of the subject are the most

pompous and dogmatic on the ventilation question. I once went, at the instigation of some members, to inspect the ventilation arrangements of the Victorian Parliament Houses, architecturally one of the finest buildings in the world. The first thing I noticed was a row of holes somewhat like spittoons between the Treasury bench and the table. I was gravely informed that carbonic acid being heavier than air fell to the bottom and that these holes were so placed as to let it escape and keep the Ministers in a purer atmosphere than the rest. I was quite satisfied and left hurriedly.

I am, Sirs, yours faithfully,
D. BOSWELL REID, Brigade-Surgeon-Lieutenant-Colonel, Victorian Military Forces (retired list);

For 30 years chief surgeon of the Geelong Hospital, Australia; formerly Demonstrator of Anatomy and Operative Surgery, University College, London.

April 25th, 1903.

A NEW ORDER OF NURSES.

To the Editors of THE LANCET.

SIRS,—May I, as a nurse, crave a portion of your valuable space to say a few words in answer to "R. A. R.'s" letter on the above subject in *THE LANCET* of April 4th, p. 991? It is only natural for a medical man to wish to provide "a scientific practical nurse" for patients under his care at a price within their means, but has he thought of the nurse's side of the question? A "scientific practical nurse" cannot be produced without at least three years' training; she cannot enter on this training before from 23 to 25 years of age at the best training schools, 21 at the minor hospitals. It follows that she cannot begin to earn her living as a trained nurse until she is from 24 to 28 years of age at the earliest. At 40 years of age she will find it difficult, and at 45 almost impossible, to obtain work as a nurse. Her working days are at the longest from 12 to 20 years and in those years she must save enough to provide for herself when they are past. If during the whole 20 years she were never out of work, took all her own fees, and had but four weeks' holiday a year, the utmost she could earn at £2 2s. a week would be, in round figures, £100 per annum. If, after paying for her holiday, clothing, and everything else, she saved £50 a year she would do wonders and have at the end of 20 years' hard and continuous work the sum of £1000, bringing her in at 3 per cent. just £30 a year to stand between her and starvation. But to do even this she must never leave off work for illness, family calls, or any other reason, during the whole 20 years and must always be able to command £2 2s. a week. The great majority of nurses have nothing but their own earnings to depend on; many help to support relatives; can they, ought they to be asked to, work for less than a sum which, even with the greatest care, can only just produce enough to keep them out of the workhouse when too old to work any more?

Cheap nursing must either be unskilled labour or if skilled must be provided for by charity, either directly by subscribing to institutions for providing nurses at reduced fees to people who cannot afford to pay the nurse a living wage or indirectly by supporting the nurse when her working days are over, who has worked for fees which have made saving an impossibility.

I am, Sirs, yours faithfully,
A NURSE.

April 10th, 1903.

CERTIFYING FACTORY SURGEONS.

To the Editors of THE LANCET.

SIRS,—I shall be glad to hear the opinions of certifying factory surgeons as to the fees paid under the present Factory Act. In my opinion the fees are not only extremely low, but derogatory to the profession. The sixpenny fee for each examination at the surgeon's house is surely degrading and in the case of accidents 2s. 6d. to perhaps 5s. for a thorough investigation at the works, followed by a visit to the injured person and a long written report, appears most inadequate remuneration for the time and labour expended. If the general opinion is in accordance with these views, is it not possible for the Association of Certifying Factory Surgeons to draw up a petition signed by all certifying surgeons and to approach the Home Office with a view to improving the position?—I am, Sirs, yours faithfully,

April 25th, 1903.

M.R.C.S., L.R.C.P.

THE FOURTEENTH INTERNATIONAL CONGRESS OF MEDICINE.

(FROM OUR SPECIAL CORRESPONDENT.)

THE OPENING CEREMONY.

Madrid, April 24th.

THERE can be no doubt that a large theatre, like, for instance, Covent-garden or Drury-lane in London, lends itself admirably to such a ceremony as the opening of a great international congress. Everyone present must have been greatly impressed by the wonderful aspect of the interior of the Teatro Real on Thursday afternoon, April 23rd. All the scenery and side wings had been removed from the stage and it was walled round to its farthest extremity with magnificent tapestry. The carpet at the farthest extremity, which was of about the size of a small house, was of a gorgeous crimson tint, with the arms of Spain in the centre. This formed a resplendent background to the scene. The flooring of the stage sloped down to the stalls and on to the extreme end of the pit, making one vast sloping surface. In about the centre of the stage three long tables, placed so as to be slightly arched and covered with red velvet and gold braid, constituted the presidential bureau. In front a space was left clear; behind and to the right and left were stalls for the official delegates and representatives of foreign Governments. On the side of the open space that faced the Royal box a tribune or small platform had been erected which the speakers were called upon to ascend by the major-domo or reader of the protocol who was arrayed in a magnificent uniform and whose imposing presence added much to the impressiveness of the ceremony. At the centre of the table sat the Prime Minister, Señor Silvela, wearing the blue scarf or band of the Order of Carlos III., supported on his right by the Minister of Public Instruction, who wore the crimson scarf of Cristo de Portugal. Then there were Professor Brouardel with the Grand Cross of Isabel the Catholic, Dr. Calvo with the Order of Alfonso XII., and Dr. Cortejarena in grand uniform. On the left of the Prime Minister sat the Bishop of Madrid-Alcalá, Professor von Leyden, and Dr. Dubois, official representative of Belgium. All round on the stage were the leading notabilities of the Congress and among them the red gowns of the English attracted great attention, materially assisting in giving life and colour to the scene.

In front of the stage and throughout the whole house every seat and every inch of standing room were densely packed with members of the Congress and any number of other persons who somehow or other had gained admittance. It was intended that all the members of the Congress who were not on the stage should be in the body of the house—namely, the part usually occupied by the stalls and pit. But this was not done and consequently many members of the Congress were driven for want of room right up into the gallery, where they were crushed and crowded on those most uncomfortable seats which, during operatic performances, are occupied by what are popularly termed "the gods." Great was the heat and great was the sense of relief when, within a few minutes of the appointed hour, the strains of the Royal anthem announced the approach of the King. Of course, when His Majesty Alphonso XIII. entered the Royal box, accompanied by the Queen Mother, the whole house rose and cheers were given in welcome of the Royal presence. After bowing acknowledgments the King took his seat and the Prime Minister at once opened the proceedings. He called upon Dr. Julian Calleja, President of the Congress, to read his inaugural address. Of course, Dr. Calleja's first remarks were to acknowledge gratefully and gracefully the help which the patronage of the King and Queen Mother had been to the organisers of the Congress. Then he addressed himself to the learned visitors from other countries, pointing out that the splendour and renown of many of the Spanish monarchs were founded on science. "The glories of our learned men and of the golden age of our history cannot be forgotten. Though some may ignore what we have done in the past our national genius is a genius possessing an ample spirit that can freely discern and day by day, more and more, it forms a centre full of life and toleration, of scientific harmony