

represented by the luminous points of its margin. This property was probably owing to a difference of density in some other condition in the different parts of the membrane which anatomists had shewn to exist between the central and other parts of the retina. It was not improbable that the structure of each layer of the retina might be exhibited optically. He had observed two structures different from those he had described, under degrees of illumination, when the dark spot of the foramen was wholly invisible. In one of these the figures were circular lines, less than a semicircle, and in the other they were perfectly quadrangular patches of shade and other irregular form; but in both of the figures the circular lines and patches were regularly arranged like the patterns of a carpet, and no lines or patches appeared on the spot corresponding to the foramen. When any of these forms were seen while the observer was not in perfect health, the imperfection of the figures might arise from the same cause which produced hemiopsy, or other local irregularities of vision, which depended on a peculiar state of the retina.

DEPOSIT OF METAL FROM THE NEGATIVE POLE OF AN INDUCTIVE COIL IN VACUO. BY J. P. GASSIOT, ESQ.

When the electrical discharges by an induction coil were made from platinum wires, hermetically sealed in a vacuum tube, as usually constructed, the wire which was attached to the negative terminal of the coil shortly assumed the appearance of being corroded. This arose from very minute particles of the metal having been disintegrated and separated from the wire, which particles were deposited on the sides of the tube, in a lateral direction. If the wires were protected within the vacuum, by being covered with glass tubing extending about an eighth of an inch beyond the wire, it was the inside of the tubing that became coated with metal; but exclusive of this lateral action, a portion of the regular discharge obtruded from the glass tubing in the form of a luminous brush. This luminosity was very sensibly affected by a magnet, and could in this manner be made to impinge on different parts of the vacuum tube; and wherever it thus impinged heat was always evolved. This phenomenon of the deflection of the negative discharge was described in a paper communicated by him to the Royal Society, and as he was subsequently desirous to examine with greater accuracy the nature of the deposit thus obtained from the negative terminal, and particularly if it could be obtained in the same manner from other metals than platinum, he had an apparatus constructed in which the discharge could be in slips of glass. He succeeded in obtaining deposits of gold, silver, copper, platinum, zinc, iron, tin, lead, brass, magnesium, tellurium, bismuth, cadmium, and antimony. Tellurium, with the exception of antimony, he found disintegrated more freely than the other metals; while iron and magnesium were the most difficult, the deposit of the latter being scarcely perceptible. With aluminium wires he could not obtain any deposit after forty eight hours constant action. He had a tube constructed with two wires, both protected by glass tubing. A long slip of glass was inserted so that the discharges from the positive and negative terminals of the coil could be made with protected wires under the same conditions. The wires were of gold. The usual deposit took place at the negative, but after twenty-four hours constant action not the slightest indication of any deposit from the positive wire could be observed. Antimony, instead of being deposited in a circular form spread nearly all over the glass, and on the sides of the vacuum tube. Whatever might be the cause of the difference in the action of the electrical discharge between the positive and the negative, the disruption of the particles of metal in the latter was merely mechanical. The minute particles were disrupted by the force of the discharge, which, at the negative, met with resistance, and which resistance, under certain conditions,

was attended with considerable heating effects; as, if the wires were there, the negative invariably fused, whether the discharges were made in air or *in vacuo*.

Correspondence.

POOR-LAW MEDICAL REFORM.

LETTER FROM RICHARD GRIFFIN, ESQ.

SIR,—Permit me space to inform the Poor-law medical officers that the medical evidence laid before the Select Committee on Poor Relief is now in print, and may be procured through any bookseller for 1s. 1d., or by forwarding seventeen postage stamps to Messrs. Hansard, 6, Great Turnstile, London, W.C. Its title is *Fifth Report Poor Relief (England)*, ordered by the House of Commons to be printed, July 26, 1861. The report, appendix, and tables, occupy ninety-five folio pages.

The importance of the subject is so great that I trust every Poor-law medical officer will carefully examine the evidence, and thus prepare himself to combat any opposition that may be raised against the changes recommended. It is possible some parts of the evidence may not meet with universal approbation; but I hope all minor points will be waived, and that a general support will be given to the provisions suggested; unless this course be pursued, it will be in vain to expect the Select Committee to recommend to Parliament any material improvement in the position of the Poor-law medical officers.

I am, etc.,

RICHARD GRIFFIN.

P.S. I believe it is customary to send a copy of a paper to be reviewed to the editor of a journal; but in this instance I trust the omission will be excused, my medical brethren have not provided the means to do so.

12, Royal Terrace, Weymouth, Sept. 23, 1861.

LETTER FROM ROBERT FOWLER, M.D. Edin.

SIR,—Permit me, through your columns, to inform the Poor-law Medical Officers, more especially of metropolis, that the Fifth Report from the Select Committee on Poor Relief (England) has been issued. It contains the whole of the minutes of the evidence of Mr. Griffin of Weymouth, Dr. Rogers of the Strand Union, and myself.

I may be permitted to observe, however, that the time and the circumstances were unfortunate and unfavourable to us. Although summoned to attend, it was generally believed that the committee would not have time to examine us, or to go at all into the medical branch of the inquiry. Certain gentlemen had been delegated by the Guardians of the Bristol Union to give evidence on that day; but, owing to their non-arrival in time, the medical witnesses were hurriedly called in to be examined. Thus, a subject—not only of anxiety and concern to over 3,000 medical gentlemen, but also of infinite importance both to the well-being of 4,000,000 of the poorer population of the country, and to the pockets of the ratepayers of the whole kingdom—instead of receiving a complete and searching investigation, was compressed into the few remaining hours of the very last day's sitting of the committee. Medical questions seem at as much a discount in the favour of a Parliamentary committee-room as in that of the body itself of the House of Commons. The members of the committee soon tired with Mr. Griffin's voluminous evidence, which was ultimately put in as read. Dr. Rogers and myself had to be content with the last few minutes of the last hour. My examination did not commence till twenty-five minutes to four. Knowing that it would be practically impossible to give, in twenty-five minutes,

the detailed evidence I had prepared, and to read the documents and facts which had been furnished me in support of the statement adopted by the metropolitan Poor-law medical officers (*vide* BRITISH MEDICAL JOURNAL, May 18th), I requested permission (after answering a few questions) to be allowed to put in the statement, as well as an abstract of the views embodied therein, with the understanding that my detailed evidence in support of the same should be taken in the next session, when the committee will, I believe, obtain leave to sit again. The statement and abstract, therefore, appear in this report of the committee.

I subsequently, also, obtained permission to deliver in a memorandum embracing in detail the views I was prepared to give evidence upon. This memorandum appears as an appendix (No. 2, page 86) to the report. I am sorry, however, to observe that not only have some verbal inaccuracies and some faulty arrangement of certain of the paragraphs crept therein, but, owing to an omission, in some portions of it, of sheets of my manuscripts and tables, the sequence of the reading is in some places rendered totally non apparent, and the sense considerably obscured. This is owing to my not having been furnished with proof-sheets of the memorandum during its passage through the press. It appears that unless the sanction of the chairman of the committee is first obtained, the Parliamentary printers do not allow proof-sheets for correction. This, unfortunately, had not been done; and shortly after the manuscript memorandum was in the printer's hands, the Right Hon. Charles P. Villiers had commenced his continental tour, and his sanction was not then obtainable.

At page 89 the chief omissions occur. The reader will readily surmise that, after the paragraph ending "convenient of access", should follow the cases alluded to; and also that the next paragraph should have commenced with the assertion that "in the metropolis the distance between the poor and the relieving officer, etc., is, as a rule, not too great". A great quantity of important manuscript (with many tables) has unfortunately been omitted after the paragraph in the next column of page 89 which ends with the words "by the case". I here demonstrated the want of uniformity and equality in the salaries, amongst others, of the district medical officers of the three City unions. I also stated how the application of these officers of the East London Union for an increase of salary was met at their Board by a return showing the rate per head of the sums paid for medical relief on the population of several metropolitan unions and parishes. This preamble is *absolutely necessary* to render intelligible the succeeding paragraph, which is, however, a part only of my illustration of the fallacy of thus computing medical salaries. At page 93, the reader will also detect the absence of a requisite preamble to the last paragraph of the first column, commencing "In every case". In the second column, there is also entirely omitted, before "3. Pauper Lunatics", No "2" case in point; viz., *Ody versus* the Harborough Guardians, as detailed in the *Lancet* of Jan. 31st, 1857. The verbal inaccuracies and the faulty arrangement of some of the paragraphs will at once strike the reader, without my occupying further space with their enumeration.

It will be for the Committee of the Metropolitan Poor-law medical officers to determine whether or no it will be advisable to furnish the Parliamentary Poor-law Committee next session with these details and facts that have been omitted.

Owing to the lateness of the session when the medical evidence was received, it was not considered desirable to present to either of the houses of legislature the petitions agreed upon at the general meeting of the metropolitan Poor-law medical officers on May 10th ult. These petitions embody the statement which appears in the aforesaid appendix, and which was adopted at the

meeting at the rooms of the Royal Medical Benevolent College. The petitions are still in circulation for signatures, and will be presented at the next session of Parliament.

I will, in conclusion, take this opportunity of drawing the grave attention of the whole body of the Poor-law medical officers to this very important fact. From the remarks of the chairman, made both to Mr. Griffin and myself, it is evident there is, *and will be*, a very strong endeavour on the part of the guardians to obtain the annulling of the permanency of our appointments. It is well known that many of the boards of guardians are in opposition to a continuance of the present powers of the Board above. Unless, therefore, great care and exertions are used during the recess by the medical officers, we may find that the results of the Committee's labours will be a compromise, in which the annual appointment of all the officers of the union will be thrown in by the Poor-law Board as a "sop in the pan", to mitigate and appease the antagonism of the guardians to the re-obtainment of the protective powers of Gwydyr House.

I am, etc., ROBERT FOWLER, M.D. Edin.,
Hon. Sec. to the Committee of the Metropolitan
Poor-law Medical Officers.

145, Bishopsgate Without, Oct. 1st, 1861.

HOW TO NEUTRALISE QUACKERY.

LETTER FROM G. E. JEAFFRESON, ESQ.

SIR,—For homœopathy, and such forms of quackery, we medical men have to thank ourselves; and the annoyance we suffer from open quackery serves us right, and ought to be our rebuke.

Put down one form of quackery, and another will spring up, unless we can make our profession honest and wiser. We talk about dishonest lawyers; it is infinitely more easy to be an honest lawyer than to be a medical practitioner entirely guiltless of quackery. The public with whom we have to deal are crassly ignorant of even the rudiments of physiology; they regard medicines as all-powerful to cure disease (which we know they are not, and yet we hesitate honestly and loudly to proclaim it); and they naturally consult those who, they think, can wield medical weapons most skilfully against their aches and pains.

In their eyes, we want to take prominent places as skilful medical men; and, in order to attain this, how do we act? If we are called to a case of illness, which, from ignorance, the bystanders believe to be severe, but which we, from special training and education, know to be really slight, and such that in twenty-four hours Nature would effect a cure, if the case be put in a situation from which injurious influences are excluded,—what do we? Why, we try to look wise, and declare that we can give the case some medicine which will make it better, and then add the requisite directions for management. The medicine is given; the case gets well; and the bystanders say, "Oh, what a clever man, to give medicine which cures so quickly"; the management having, of course, held a place of only secondary importance in their minds.

If we give medicine where it is not absolutely necessary, or if we administer it while Nature is curing the patient, we must be very careful to recognise, in the recovery, how little is due to the medicine, and how much to Nature; and then honestly and frankly allow to Nature her full due. If we do not, the public will naturally infer that the medicine did the good; and in the next case of illness, if they take a globule instead of some allopathic remedy, who can blame them for attributing the good to the globule? for, in so doing, they merely use the same chain of reasoning which we have tacitly sanctioned while we thought it answered our own ends.