Correspondence.

"Audi alteram partem."

THE PROPOSAL TO PROHIBIT MEDICAL PRACTITIONERS FROM DISPENSING.

To the Editors of THE LANCET.

SIRS,—I observe that on Jan. 27th the members of a branch of the British Medical Association are to be asked to pass a motion to the effect that "no person registered under the Medical Act (with a few exceptions) shall dispense or supply drugs or other medicaments to anyone." The suggested penalty for a first offence against the aforesaid is to be a fine of not less than £100 and for the second offence erasure peremptorily from the Medical Register. The General Medical Council has judiciary power, of course, over the medical practitioner but it exercises no jurisdiction and is never likely to have any legal authority over the druggist. Those who, like myself, are engaged in consulting practice know well the unlimited extent to which one's prescriptions may be bandied about and that the druggist may without let or hindrance dispense any given prescription as frequently as its repetition is requested. It is now suggested that practically all practitioners—not only without option but under heavy penalty—should be compelled to adopt this method of treating and of interchange with their patients, but I fear the possible undesirable effects of such an enactment have not been duly considered by those who are responsible for the promulgation of this proposed scheme. Take the practitioners in populous but not over-wealthy districts and we are bound to infer that: if this project be adopted many of their patients will be not only unwilling but unable to pay both for the prescription and for the medicaments which may be written thereon, for the patient's ailment will in such circumstances be required to contribute towards the maintenance of two expensive establishments, that of the medical man and that of the druggist, instead of one as at present. The ever-increasing demand upon the out-patient departments of our hospitals is already a vexed question and one difficult to cope with, but it will be apparent to everyone that if the scheme which I now refer to should eventually become law our out-patient departments will become still more unwieldy and more reprehensible, for the new procedure will prove too expensive to many and will drive to our hospitals those who, but for this new requirement and unnecessary extra expense, would never have entertained the idea of seeking advice at any of our charitable institutions. I feel assured, therefore, that this departure is one which cannot commend itself to the medical profession generally and should be strenuously opposed whilst the project is still in its embryonic state.

I am, Sirs, yours faithfully,

Gordon-square, W.C., Jan. 19th, 1904.

JAMES OLIVER.

MALIGNANT GROWTHS AND NORMAL REPRODUCTIVE TISSUES.

To the Editors of THE LANCET.

SIRS,—In your issue of Dec. 26th, 1903, p. 1830, there is an abstract of some observations by Professor J. B. Farmer, Mr. J. E. S. Moore, and Mr. C. E. Walker. They have been investigating karyokinetic processes in malignant tumours, a field of investigation in which I, too, worked extensively some years ago. Since my observations do not seem to be familiar to these authors, who are, I believe, botanists by profession, I should be glad if you would give me space in your journal for the following remarks. These authors have found that in the cell development of malignant tumours the mitotic figures exhibit certain definite differences from those occurring in normal tissues. The essential alteration lies in the fact that the cells undergo a reductive division, similar to that occurring in the formation of sexual cells, whereby germinal tissue is formed. The authors state explicitly that the cells do not become embryonic, in fact, differ from these through the small number of their chromosomes. In addition, the chromosomes are also changed in shape. These observations coincide more or less with those described some time ago in various publications—e.g., Virchow's *Archiv*, vol. cxix., 1890, p. 299; *Archiv für Mikroskopische Anatomie*, vol. xliii.; the *Festschrift für*

Virchow, in 1891; and in the *Verhandlungen der Anatomischen Gesellschaft*, in 1891, p. 255, and elsewhere. I have given a connected account of these processes in my monograph, entitled "Die Studien über die Spezifität, den Altruismus und die Anaplasie der Zellen" (Berlin, 1893), and reverted to the subject in my book on "Die Mikroskopische Diagnose der Bösartigen Geschwülste" (second edition, Berlin, 1902) on pp. 91 *et seq.*

According to my investigations it is not a question of a reduction to exactly one-half the normal number of chromosomes nor does the reductive division occur in the manner seen in the maturation of ova and spermatozoa. According to my observations the reduction is effected in a two-fold manner—either by asymmetrical nuclear division or by a destruction of individual chromosomes without destruction of all the nuclear substance. The first result by either of these two processes is cells with a smaller number of chromosomes than normal. I have called these cells *hypochromatic*. In the further stages of development these chromosomes may be doubled, quadrupled, sextupled, and so on, so that from hypochromatic hyperchromatic cells may arise but always with a smaller than the normal number of chromosomes of human cells. I have sought to correlate with these observations the peculiar characters which the cells of malignant growths possess, especially their greater power of independent existence and their loss of differentiation as compared with the normal tissue cells. The combination of these two properties I have termed *anaplasia*, an expression now very generally employed in the scientific world even by those investigators who do not altogether agree with the details of my observations on the cell processes. I have also given a detailed account of the change of form of the chromosomes and have shown how extraordinarily manifold their form may be in malignant tumours which in nearly all cases differ not only from normal tissues but also amongst each other, so that not only in different cancers but in one and the same the most varied forms of chromosomes may be found.

Since these investigations are, perhaps, but little known in England I am naturally anxious in reference to the investigations of Professor Farmer, Mr. Moore, and Mr. Walker to guard my priority of observations in this field.

I am, Sirs, yours faithfully,

Berlin, Jan. 16th, 1904.

PROFESSOR D. V. HANSEMANN.

To the Editors of THE LANCET.

SIRS,—The letter of Professor v. Hanseemann, a proof of which you have allowed us to see, contains a number of misleading statements some of which call for comment. Incidentally we may remark that only one of us is a botanist, although two of us have been frequently associated in work on vegetable, as well as on animal, cytology.

We are at a loss to understand why Professor v. Hanseemann should assume that we are unaware of his investigations. As a matter of fact we are perfectly familiar with them, and as a consequence with the circumstance that our own conclusions respecting the meaning of the cytological phenomena in question are in all essential features at variance with those arrived at by him. It is perfectly clear both from his letter and still more so from a study of his work of 1902, cited by him, that he has either entirely misapprehended the facts connected with the "reducing" divisions characteristic of sexually reproductive tissue or that he has not succeeded in tracing the similarity that exists between the processes in them and in malignant growths respectively.

Professor v. Hanseemann's statement that the occurrence of an odd number of chromosomes in any cell of any animal is necessarily due to either an asymmetrical division or to degeneration (or elimination) is not in accordance with known facts. There is no *a priori* reason why a cell that has undergone reduction should not possess an odd number of chromosomes, and, indeed, some animals do exhibit such numbers. It is only the *somatic* cells that normally must contain an even number and this is due to the fact that ovum and sperm each possess identical (even or odd) numbers before their union in fertilisation.

No one who has examined the dividing nuclei of malignant tissue has doubted the occurrence of abnormalities, but no one, so far as we are aware, and certainly not Professor v. Hanseemann, had previously suggested those resemblances between reproductive and malignant tissues that are involved in the recognition, in each, of the existence of the heterotype

mitosis. Indeed, we have so far failed to identify those special points in our own communication for the discovery of which Professor v. Hansemann is so anxious to guard his priority. For whilst, in common with others who have worked at this subject, we have naturally recognised the frequent occurrences of irregular nuclear divisions, the conclusions we have reached, as well as the interpretation we have put on the facts, are, as Professor v. Hansemann admits in his letter, widely divergent from those to which he has himself been led.

We are, Sirs, yours faithfully,

J. BRETLAND FARMER.
J. E. S. MOORE.
CHARLES WALKER.

* * In the circumstances we decided to give Professor Farmer, Mr. Moore, and Mr. Walker an opportunity of replying to Professor v. Hansemann in the same issue of THE LANCET in which Professor v. Hansemann's letter appears.—ED. L.

THE METROPOLITAN ASYLUMS BOARD AND ITS ASSISTANT MEDICAL OFFICERS.

To the Editors of THE LANCET.

SIRS,—To the reasons assigned by you in the annotation on the above subject in THE LANCET of Jan. 16th, p. 177, for a more reasonable notice than one month being given prior to the dismissal of the seven assistant medical officers on the ground that there is no work for them to do, may I add a further consideration—to wit, the probability that the services of these gentlemen will be required should the Local Government Board authorise the managers of the Asylums Board to provide accommodation for the isolation and treatment of persons suffering from consumption? In this connexion I would point out that the Poor-law infirmaries are rapidly filling up, pauperism already standing at a high level, and being likely still further to increase should the winter prove severe. In which event it would be of great advantage to the metropolis should the Local Government Board's decision enable the managers to relieve those establishments by the transfer to Gore Farm hospitals of a sufficient number of consumptives—say 850—to fill the lower hospital which was designed for the reception of that number of small-pox patients.

I am, Sirs, yours faithfully,

Kensington, Jan. 16th, 1904.

T. ORME DUDFIELD.

* * We publish Dr. Dudfield's sensible suggestion with pleasure and wonder whether it is too late for the Metropolitan Asylums Board to reconsider its injudicious action. The medical profession would like to hear the reasons for the dismissal of the seven assistant medical officers fully explained. Is it true that the places of the salaried men are to be taken by unpaid young men seeking to acquire the instruction necessary to obtain the diploma of public health? We have heard that this dangerous innovation may be going to take place.—ED. L.

THE UNRESTRICTED SALE OF DAN- GEROUS DRUGS.

To the Editors of THE LANCET.

SIRS,—I desire to call attention to a grave defect in the law controlling the sale of dangerous drugs. There is apparently nothing to prevent any person who obtains possession of a prescription from procuring by its aid enough poison to kill a community.

An undated copy of a prescription has just come into my possession from a firm of pharmaceutical chemists by means of which a patient in a short period of time had obtained no less than 17½ ounces of a 20 per cent. solution of cocaine hydrochlorate. This quantity of solution contains 1680 grains of the highly poisonous alkaloid, of which, according to the British Pharmacopœia, the maximum dose is half a grain. This large amount of poison had been procured by taking this copy of a prescription to one firm of druggists after another (the names of many different firms are stamped upon it) and obtaining an ounce at a time from each, save on one

occasion when half an ounce only was supplied. Half an ounce only was ordered on the prescription. With the exception of the making up of a double dose everything seems to have been done to meet the requirements of the law. The original prescription had been apparently given to the patient by a high authority. But anything more serious to the welfare of the public cannot well be imagined than a system under which drug habits go unchecked and deadly poisons can be procured wholesale. Druggists cannot well hesitate to make up the prescriptions of well-known medical men, especially when a prescription bears upon its face the stamped names of some of the best firms in the trade certifying that it has already been dispensed by them.

The remedy which suggests itself to me and which probably might be adopted not only in connexion with the prescribing of lethal doses of dangerous drugs but also with regard to many prescriptions for disorders requiring but a short course of treatment, is one which I am assured by a highly respectable firm of pharmaceutical chemists they would gladly welcome. It is, that in all cases where medical men prescribe such drugs as morphia, opium, cocaine, &c., which are known to induce a habit, the words "*Not to be repeated*" should be written across the prescription, which should be signed by the prescriber in full and not merely initialled. By this means the prescriber would be able to control the quantity of the drug taken or used and prescriptions would not be handed about from one person to another *ad libitum*, especially if the words "*not transferable*" were added. We know but too well how many valuable lives are lost and reputations ruined under the working of the present system which loudly calls for amendment. I may add that I fortunately obtained possession of the poison and the prescription from the patient and was thus enabled to save a valuable life.

I am, Sirs, yours faithfully,

Margaret-street, W., Jan. 19th, 1904.

T. OUTTERSON WOOD.

SOME FORMS OF CHRONIC ABDOMINAL SURGICAL DISEASE.

To the Editors of THE LANCET.

SIRS,—Mr. E. Stanmore Bishop in his address under this title¹ gives currency to two theories concerning the action of the colon which I believe to be ill-founded. The first of these is Dr. R. W. Leftwich's theory (to quote Mr. Bishop's words) "that the contents of the large intestine are carried forwards mainly by syphonage, although peristaltic action is also present to a subsidiary extent." The objections to this theory are: 1. It assumes that the walls of the colon have a sufficient rigidity to allow syphonage to occur; not only is the wall of the *living* colon eminently collapsible but it is subject to the intra-abdominal tension kept up constantly by the elasticity and contraction of the abdominal walls. 2. It assumes that the contents of the descending colon are in a sufficiently fluid condition, which is not normally the case. 3. Dr. W. B. Cannon's² observations on the passage of the contents of the colon, made on the cat by means of bismuth-laden food and x rays, revealed the fact that there is normally an anti peristalsis in the proximal part of the colon; in this movement the parts corresponding to the human ascending and transverse colon were involved. In the arrangements of its muscular coat the colon of the cat does not differ from that of man; we may safely infer that the peristaltic movements are the same. The characteristic arrangement of the muscular coats of the colon is adaptational to the peculiar peristaltic movements which occur in the colon. 4. The muscular coats of a foot of colon weigh more than those of two feet of small intestine. One may infer that they are sufficient for their work in the case of the great intestine as in the case of the small without the aid of syphonage. 5. Except in the possession of an extremely short mesentery for the ascending colon, the arrangement of the great intestine of man does not differ from that seen in many mammals, in which, because of their posture, syphonage is impossible. Yet the muscular coats of the human colon are better developed than is generally the case in mammals. 6. It is impossible to obtain a syphon action in the human colon by experiment on the cadaver.

¹ THE LANCET, Jan. 16th, 1904, p. 139.

² American Journal of Physiology, vol. vi., p. 251.