of electronic automatic counters has completely altered this, for they can count many thousands of cells in a few seconds. The Coulter Model "S" counts approximately 18,000 cells in each of three replicate channels in four seconds. These three replicate counts correspond closely and the inherent error should be only a fraction of that of counts done visually.

Automatic cell counters may introduce a number of errors of their own, such as co-incidence counts, incorrect setting of the threshold of discrimination, or those due to the presence of bubbles in the sample line. Nevertheless the precision now achieved with red cell counts gives the M.C.V. a status that it could not hold previously.

(3) Neither the manual nor the automatic M.C.H.C. is deceiving us—provided we recognize that they do not always measure the same thing. Where manual techniques remain in use the M.C.H.C. continues to be a useful index of hypochromia, though it should be recognized that it does not reflect a true reduction of the haemoglobin concentration in individual red cells. In those hospitals where the Coulter "S" has been installed the M.C.H.C. now seems to serve little practical purpose except perhaps in the important field of quality control, and attention must now be directed mainly to the M.C.V. In other words the manual M.C.H.C. reflects hypochromia but is not a true measure of mean haemoglobin concentration, whereas the automatic M.C.H.C., just because it is a true reading of mean haemoglobin concentration, is now of little value and is being supplanted by the M.C.V.

The examination of a well-prepared blood film remains of primary importance. The M.C.V., M.C.H., and M.C.H.C., however they are measured or calculated, are only mean values, and an examination of the blood film remains essential to reveal the diversity of cell size, age, shape, and "haemoglobulinization" that lies concealed by these mean figures.—I am, etc.,

P. J. BLACK

Guy's Hospital,
London S.E.1

¹ Dacie, J. V., and Lewis, S. M., *Practical Haematology*, 4th ed., p. 26. London, Churchill, 1958.

Nephrotoxicity of Cephaloridine

SIR,—Dr. T. Rosenthal and Dr. H. Boichis (9 October, p. 115) report a patient in Israel who died in acute renal failure following cephaloridine administration. Of the few details given the following are important and probably relevant to the possible nephrotoxic reaction: the patient was aged 70 years; she had subacute bacterial endocarditis; a penicillin hypersensitivity reaction was elicited by ampicillin immediately before the start of cephaloridine and progressive oliguria developed during therapy. Among many other details not mentioned, but highly relevant to the outcome, are the following: the dose of cephaloridine and if it was adjusted appropriately for the age of the patient, or reduced at all when oliguria appeared; whether the patient was in heart failure at any time, or concurrently receiving other potentially nephrotoxic antibiotics, particularly aminoglycosides, or potent diuretics, particularly frusemide.

The normal human adult kidney can

excrete a maximum of six grammes of cephaloridine each day, though this amount decreases over the age of 50. If higher total daily doses are used, or if the dosage is not reduced appropriately in the elderly or in patients who have renal impairment initially because of disease, the concentration of the antibiotic in the plasma and tissues may accumulate and achieve possibly toxic levels.

I analysed¹ 36 cases of possible cephaloridine nephrotoxicity reported in the world literature and found the following factors common to many of the patients: a dosage of more than 6 g/day, excessive by any standard; patients with either definitely impaired or doubtful renal function before treatment, often treated without an appropriate dosage reduction; patients' age mostly over 50 years; bacterial endocarditis as the primary diagnosis; intercurrent penicillin or cephaloridine hypersensitivity reactions, in some cases possibly responsible for kidney damage and reduced function; the concurrent use of other potentially nephrotoxic antibiotics; and the concurrent use of potent diuretics. As a result of this latter observation I suggested that potent diuretics, particularly frusemide, may enhance the potential nephrotoxicity of cephaloridine and this was later confirmed in laboratory animals.²

In many of the 36 patients a fatal outcome to renal failure was avoided by either stopping or, at least, reducing the dosage of cephaloridine as oliguria and increasing uraemia developed. As Drs. Rosenthal and Boichis state cephaloridine should be used with care but this is a recommendation that applies to all drugs. Is it not timely to plead for drugs to be used only after full study of, at least, the manufacturers' standard information sheets on their products?—I am, etc.,

ROY D. FOORD

Medical Department,
Glaxo Laboratories Ltd.,
Greenford, Middlesex

¹ Foord, R. D., *Proceedings of the 6th International Congress of Chemotherapy*, Tokyo, 1969, 1, 597. University of Tokyo Press, 1970.

² Dodds, M. G., and Foord, R. D., *British Journal of Pharmacology*, 1970, 40, No. 2, 227.

Hospital Information Booklets

SIR,—Most general and psychiatric hospitals now produce information booklets or pamphlets for their patients and visitors. From a cold statement of committee rules these productions have gradually become more friendly and helpful in outlook to assist patients face the uncertainty and anxiety which accompanies hospital admission.

The patient, his relatives, family doctors, consultants, nurses, and administrators have an interest in the contents and effectiveness of hospital information booklets. In general these need to cover at least the address and telephone number of the hospital and how to get there; where to report on arrival and what to take along; visiting times and advice about food and gifts relatives may wish to bring; how to obtain information from doctors, nurses, medical social workers, and so on; and information about consent forms and involvement in teaching.

Some advice about facilities—cultural, secular, and religious—could be given, and the hospital procedure for discharge, follow-up, investigation of any complaints, etc., explained.

A plan of the hospital, a few pictures,

and a brief note about the history and management of the hospital can enhance the interest and usefulness of a booklet. In a psychiatric hospital information about the aims of the hospital and rehabilitation facilities is helpful, and a brief explanation of "informal" and "detained" and the patient's rights is desirable.

While information booklets can be standardized to some extent, they are still a field where hospital authorities can show their own initiative, imagination, and real concern about assisting their patients.—I am, etc.,

D. A. SPENCER

Meanwood Park Hospital,
Leeds, Yorks

Use of English

SIR,—Readers and participants on this subject may be interested in the views of Sir Arthur Quiller-Couch, sometime King Edward VII Professor of Literature at Cambridge University. His lecture concerning the practice of writing (1913) contains the passage set out below.

"But I have another word for our men of science. It was inevitable, perhaps, that Latin—so long the Universal Language—should cease in time to be that in which scientific works were written. It was impossible, perhaps, to substitute by consent, some equally neat and austere modern language, such as French. But when it became an accepted custom for each nation to use its own language in scientific treatises, it certainly was not foreseen that men of science would soon be making discoveries at a rate which left their skill in words outstripped; that having to invent their terms as they went along, yet being careless and contemptuous of a science in which they have no training, they would bombast out our dictionaries with monstrously invented words that not only would have made Quintilian stare and gasp, but would affront the decently literate of any age."—I am, etc.,

R. SIMPSON-WHITE

Plymouth

SIR,—I do hope Professor J. G. Scadding's wistful protest (6 November, p. 364) will stimulate a healthy response. He has for long been concerned with plain English, and many of us who care about words must wish, like him, that standards in medical literature were higher. Managerial English—if this expression is intelligible—is equally irritating: there was a time when "viable" was an adjective which applied peculiarly to the fetus. Now (or, must I say, "at this moment in time") even obstetricians may apply it to an operating timetable.

I hope also that Professor Scadding would agree that some cross-breeding is a good thing, and certain new expressions which reach us from across the Atlantic ocean enrich the language; some abbreviations are an improvement, too. To "take the point" and to be normally "oriented" are examples. May he long continue to knock slovenly, ungainly, and meaningless English.—I am, etc.,

J. H. SIMPSON

Exeter

** This correspondence is now closed.—
Ed., B.M.J.