Ear Capsules used in this study.

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THE ACCURACY OF HAEMOGLOBIN DETERMINATIONS WITH THE SPENCER HAEMOGLOBINOMETER

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FIVE YEARS AGO Dr H. Kramer recommended the Spencer haemoglobinometer made by the British-American Optical Company for use in general practice. At that time no critical review of the instrument had been published. The manufacturers kindly made available one instrument for trial. This instrument uses a demountable glass cell in which is confined undiluted blood haemolysed by saponin. The cell is observed through a green filter using an eyepiece in which half the field is occupied by the cell, and half by an optical wedge. The optical wedge can be moved by a small handle which carries a pointer moving over a scale graduated in units of 0.5 g. haemoglobin per 100 ml.

Some tests on the instrument have now been performed. They were done by one operator filling the cell and lysing the blood, and then handing the instrument in turn to five observers each of whom recorded his observations without communicating them to the others. The results were collected and recorded by the operator. This operator selected the blood samples from among those which had been examined by the laboratory earlier that day; they covered the range 4.0 to 16.5 g. haemoglobin per 100 ml. At that time the alkaline haematin method was used routinely and was standardized monthly against the analysed blood sample distributed by the Keeler Optical Company Ltd. Daily standardization was with the Gibson-Harrison artificial standard.

One hundred sets of observations were made. One observer was missing for three samples and another for one, so the best estimates for

the missing values were calculated and inserted. An analysis of variance was then performed.

Observers B, C, D, and E agreed very well with each other, but had a mean reading about 4 per cent higher than that obtained by the standard method. Observer A read about 1.3 per cent higher than his colleagues.

In some cases the five observers agreed well among themselves, but differed appreciably from the standard method—e.g., the observers results ranged from 7.2 to 7.8 g. against 5.9 g. for the standard, or 10.5 to 11.5 g. against 14.2 g. These discrepancies are probably due to imperfect sampling of the blood. In a separate investigation by one of us (AJG) such sampling errors were shown to be due to the difficulties of manual dilution, because semi-automatic sampling with a modified Seligson pipette, designed by another (GD) made them much less frequent.

The coefficient of variation for the Spencer haemoglobinometer is estimated to be 3 per cent. This is a very satisfactory value, and enables us to recommend the instrument to all those who want a convenient portable haemoglobinometer. It seems particularly suited for use in general practice.

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POISONOUS SNAKES OF SOUTHERN AFRICA

In order to fill the long-felt need for an authoritative review of this subject, the Cape of Good Hope Faculty of the College of General Practitioners invited Mr John Visser, who is well-known to museums and universities both in South Africa and overseas through his own herpetological work, to undertake the task of compiling such a review.

The result has been the publication of a splendid volume " Poisonous Snakes in Southern Africa," written by Mr John Visser and sponsored by the College of General Practitioners. The book is a balanced and integrated account which fills the need of physicians, first-aid organizations and the public. In addition to its other qualities, it is the first book in which all the South African poisonous snakes are illustrated in colour. These splendid illustrations are produced on art paper and will serve as an invaluable guide for identification of the snakes involved in possible snakebites, and therefore also for the illustration of the correct treatment.

The publication of the book was not only sponsored by the College of General Practitioners but also checked at all stages by the author's colleagues and by various medical specialists. It can therefore, be regarded as a truly authoritative guide in this field.

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