Technical method

Table II lists the calculated and obtained concentrations of CO₂ in the jars. Most of the determinations show remarkable accuracy in the setting for the required CO₂ concentrations. The few exceptions were deviations of less than 10% of the required concentration. Calculating deviations in CO₂ content, caused by varying numbers of petri dishes in the jars, resulted in a maximum discrepancy of 7.3% from the set CO₂ concentration. If necessary, this may be corrected by adjusting the setting of the plunger. The use of somewhat smaller jars does not impair the performance of the apparatus. Calculation of the CO₂ content of a jar of 2500 ml, with a setting of the plunger adjusted to a 10% concentration for this size of jar, showed that with the expansion drum described, a concentration of 10.02% will be obtained.

These results indicate that the apparatus has a performance which is amply sufficient for the

purpose intended. Handling the apparatus presents no difficulties for technicians.

I am indebted to Mrs J. A. van der Bult and W. A. van Beek of the Division of Mechanics, Department of Medicine, for their helpful advice and for the construction of the apparatus. I also wish to thank Drs R. J. M. de Leeuw and his technical staff for determining CO₂ concentrations by means of Lloyd's gas analyzer.

References

- Ferguson, W. (1945). Optimal carbon dioxide tensions for primary isolation of the gonococcus, *Amer. J. Syph.*, 29, 19-55.
- James-Holmquest, A. N., Wende, R. D., Mudd, R. L., and Williams R. P. (1973). Comparison of atmospheric conditions for culture of clinical specimens of *Neisseria gonorrhoeae*. *Appl. Microbiol.*, 26, 466-469.
- Lloyd, B. B. (1958). A development of Haldane's gas analysis apparatus *J. Physiol. (Lond.)*, 143, 5-6.
- Nye, R. N., and Lamb, M. E. (1936). Increased carbon dioxide tension. *J. Amer. med. Ass.*, 106, 1075-1076.
- Wilson, G. S. (1931). The gaseous requirements of *Br. abortus* (bovine type). *Brit. J. exp. Path.*, 12, 88-92.

Book reviews

Tumors of the Head and Neck: Clinical and Pathological Considerations By John Batsakis. (Pp. x + 388; illustrated. £9.25.) Baltimore: Williams and Wilkins Co. 1974.

This book in a relatively small compass has achieved the author's objective which was to produce a text for pathologist, otolaryngologist, and head and neck surgeon. In the preface he states . . . 'the pathologist must become an active and informed member of the diagnostic and therapeutic team and not retreat into his cloister of tissues and slides'. Amen, to that, and the surgeon likewise I would say.

No practical, problematic issue is glossed over in the traditional way ('regressing melanoma must be distinguished from inflamed naevus') and much of the writing bespeaks a forceful teacher. The bibliography is outstanding, the illustrations choice and in generous quantity. The only criticism the reviewer has is that apart from evidence of careless proof reading, the original manuscript shows no evidence of having been revised with a view to improving the crude syntax. Nevertheless, textual ambiguity is absent and the reader is assured of both a balanced account of

tumour pathology and clinical behaviour as well as Batsakis's personal convictions, and they are worth having, since his experience is vast in a breadth and depth unobtainable anywhere in the British Isles.

If, after reading this account of common and rare tumours, the clinician does not grasp the import of a histological report, nothing will avail.

ARNOLD LEVENE

Manual of Histological Demonstration Techniques By H. C. Cook. (Pp. ix + 314; illustrated. £4.50.) London: The Butterworth Group. 1974.

Books on histopathological technique were few until comparatively recently, but now there are many that vary from good to excellent and this new manual enters a highly competitive field. The stated aim of the author is to provide a comprehensive coverage of methods for the demonstration of various tissues and cellular components. There are only four pages on commonly used haematoxylin after which the book is entirely devoted to what most people call 'special stains'. Chapters begin with brief notes on basic principles and

there are useful comments on each method. These are carefully selected, well described and liberally sprinkled with tips and hints that come, one feels, from vast personal experience. The appendices include one on buffers, one on suggested control materials, and one on the history of the subject. There are 30 monochrome illustrations and a pretty comprehensive list of some 300 references is also supplied.

This work is clearly not intended to be a textbook on histopathological technology, but one misses, nevertheless, an introduction to the comparative merits of fixatives, processing techniques, and equipment. The plastic ring binding and soft covers are a weakness and are unlikely to stand up to bench top use for very long. The illustrations are poor and they might well have been omitted, making the book cheaper or the saving in cost used to provide a hard back cover.

None of these criticisms detract from the value of this book as an authoritative guide to special staining methods and it should prove useful to technicians and pathologists with some experience who wish to improve or perfect the standard of technical work in their laboratory.

P. P. ANTHONY