

without precedent. There are no data, for example, on how a society is likely to react after a third of its entire population is killed in a single day. The conclusions of even a thorough study of the recovery problem would therefore have to be regarded with a high degree of scepticism. Yet Mr Laurie, after a very superficial analysis based on capital investment rates, assures us that "in something like twelve years we should be back to normal". In my judgment, this is not only nonsense but dangerous nonsense. Fostering such complacency can only make the public more receptive to the idea that initiation of nuclear war by the West is a rational possibility to be entertained under some circumstances. That would indeed be a tragedy.

LEO SARTORI

The Commonwealth List

Commonwealth Universities Yearbook, 1970: A Directory to the Universities of the Commonwealth and the Handbook of their Association. Edited by J. F. Foster and T. Craig. Pp. xx+1,874. (Association of Commonwealth Universities: Edinburgh, July 1970.) 195s; \$24.

THE *Commonwealth Universities Yearbook* remains one of the most tangible indices of the expansion of higher education, with 1,874 pages of text spread, this time, over three and not two columns. The editors explain that this change of format has been forced on them by the growth of the Commonwealth of the British Universities. If anything, the introductions to the various university systems are more complete than ever. There are exceptions; the Australian chapter, for example, skates round the question of salaries which seems continually to exercise Australian academics. The British chapter takes the view that the memorandum of guidance issued by the University Grants Committee in 1967 has enhanced the importance of the Committee of Vice-Chancellors, but has nothing to say about the row now brewing up between the universities and the British Government. If pages are anything to go by, Britain counts for roughly a third of the Commonwealth university system; India is one of the most quickly growing.

On the whole, the universities of the British Commonwealth seem to have been comparatively traditional in the design of their curricula, although the University of Toronto has broken new ground, or at least terminology, by bringing aerospace studies into academic life. American studies are booming, with thirty universities offering courses throughout the Commonwealth. Chinese studies are growing less quickly, with almost as many universities interested in Australia (six) as in Britain (nine). Molecular biophysics has made its appearance at Oxford, molecular sciences at several places (but the

year book declines to follow fashion by listing molecular biology separately from biology or genetics), while the number of brands of physics classified separately from physics pure and simple is thirty-four (including the no doubt fashionable physics of the Earth's environment at Oxford).

Future Galtons will find little to help them in the year book's collection of names. There are now, however, three Bernal's in academic life. Banerjee rates a column and a half in the index, while Bell claims only just over a column, the same rating as Bhattacharyya (the apparently less common variant with a single "y" brings the whole score up to nearly two columns). Predictably, Brown rates four columns (with and without an "e"). Chapman does well with nearly a column. Cook is less academically successful than Brown, Davis/Davies is less well represented than in the London telephone directory, even when both spellings are lumped together. One Galton persists, appropriately enough in London, and there are two Darwins and eight Huxleys.

JOHN MADDOX

Infamous Fungus

The Story of Ergot. By Frank James Bové. Pp. viii+297. (Karger: Basle and New York, 1970.) 66 Sw.francs; \$15.85; 66 DM; 132s.

It is now forty years since George Barger wrote his classical monograph *Ergot and Ergotism* in which he not only described in detail the poisonous role of rye ergot since mediaeval times, but also gave an account of the current knowledge of the biology of the ergot fungi and the chemistry and pharmacology of the ergot alkaloids. Since then, groups in many parts of the world have contributed extensively to research on the ergot alkaloids, notably in the fields of chemistry and pharmacology. Structural modification of the complex tetracyclic ergoline nucleus and its derivatives have led to novel and improved pharmacological properties which have reinforced the established place of these alkaloids in modern medicine. In more recent years, high yields of lysergic acid from deep fermentations have facilitated the semi-synthetic production of the medicinal alkaloids. Such progress has justified the several excellent specialized reviews which have appeared in the literature during the past ten years, notably Hofmann's splendid volume *Die Mutterkornalkaloide*.

Now Dr Bové has tackled the formidable task of writing a comprehensive monograph which, although conceived as a popular presentation, covers not only the pharmacognosy and pharmacology of ergot, but also ergoline biosynthesis. Bové has embraced a large and diffuse

bibliography and, consequently, presents a wealth of interesting information. Some references for 1968 are given, but the treatment of some of the more rapidly expanding topics is necessarily out of date. The author's lack of professional scientific involvement in ergot research, coupled with a marked tendency to over-dramatize, has resulted in some inadequate assessment of the literature and the perpetration of erroneous reports. For example, the publication which wrongly described 12-hydroxystearic acid (instead of ricinoleic acid) as a major component of rye ergot sclerotial oil is twice mentioned and given prominence as having reported a novel component.

The most striking feature of this book is the unfortunate style in which the subject matter is presented and which greatly detracts from its readability. This may be best illustrated by the following extract which opens the section on the chemistry of ergot: "The chemistry of ergot is complex. Compound complex. Compound because most alkaloids appear in pairs or triads. Most amino acids too. Perhaps the pigments also. Complex because the great number of substances in ergot are—within their groups—very similar. Thus difficult to separate. And isolate. And of course difficult to determine their true structure. Especially of the alkaloids. And pigments. This has now been done. Almost. But still several alkaloids remain to be discovered. Several non-alkaloidal substances too. Pigments. Enzymes. Glucans perhaps. The chemistry of ergot remains complex. And subtle too". It is a great pity that the considerable work involved in preparing the subject matter could not have been complemented by a presentation which, while thrilling to read, still had literary merit.

There is no doubt that the story of this most famous fungus could command a wide readership but this book is unlikely to achieve this goal. The subject is liberally endowed with intrinsic interest—poisoning shrouded in mediaeval folklore, herbal medicine, modern obstetrics and migraine therapy, complex pharmacology, industrial fermentations, plant pathology, chemistry and biochemistry, and the more recent abuse of the hallucinogenic drug LSD. If this book were to be re-written, while retaining its overall plan, it could become an attractive reference volume of lasting value.

P. G. MANTLE

Counsel about Cancer

What We Know About Cancer. Edited by R. J. C. Harris. Pp. 240+6 plates. (Allen and Unwin: London, November 1970.) 50s boards; 35s paper.

THE overwhelming need for a book which describes accurately what is known about