



SATURDAY, MARCH 31, 1934

No. 3361

Vol. 133

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*Editorial and Publishing Offices:*

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## Prices of Scientific Books

THERE are few libraries of scientific books, whether they be those of universities or other institutions or of private individuals, which have not been compelled during the last few years to cut down their expenditure upon periodicals. The loss is a loss to the library, to the scientific worker, and to the publisher, and has increased on the library shelves the much detested 'broken series'. Really the outcry on behalf of continuing old established series of periodicals may be more sentimental than rational; it is impracticable and impossible for any institution to continue all the old series and add all the new, and there is no sufficient reason why an old periodical should be continued if it has degenerated in quality or if it can be replaced by one better suited to the needs of the users of the library. Co-operation between libraries will often solve the problem of retaining the fullest possible range by avoiding duplication of the least necessary series.

The question, however, arises and is pressing. Since libraries must cut down expenditure upon periodicals, could a cut be organised which will have some effect in nullifying the conditions against which the libraries are struggling? We think it could.

Amongst many other services, the American *Quarterly Review of Biology* performs the annual service of analysing the cost of biological books received for review by that journal. The result of John R. Miner's analysis is always illuminating, sometimes astounding, and has been referred to on more than one occasion in the pages of NATURE. For 1933 the number of pages reviewed by the *Quarterly Review* was 104,725, and the comparisons are worked out on the average cost per page to the reader, the prices of foreign books having been converted into dollars at the rate current when the book was received.

In the first place it is satisfactory to notice that the general trend of prices continues to be downwards; thus a decrease of 3.6 per cent from 1932 to 1933, and of 8.9 per cent from 1926 to 1933, has brought the average price of all the books reviewed to 1.005 cents a page. This is in accord with the falling price of commodities in general throughout the world, but it is not so satisfactory to learn that the fall in price of biological books has lagged seriously behind the international decline. "Thus the books published in the United States show a decrease in price of 8.9 per cent

from 1926 to 1933, whereas the wholesale commodity price index of the United States Bureau of Labor Statistics declined about 40 per cent in the same period." The most striking decline in price has been in the books published in England (by which we imagine the author means Great Britain, for Scotland is by no means negligible as a producer of biological works), and there the fall from 0.89 to 0.66 cents a page represents more than 25 per cent. Since this difference, as converted into dollars, probably reflects the change in the relative value of the pound sterling, it is sad that we on this side of the Atlantic cannot appreciate it in buying our own books.

In the second place, it is noticeable that in spite of certain readjustments of price, a very marked discrepancy still exists between the prices of books published in different countries. Since the price comparison began in 1926, France has, until 1933, held pride of place for the cheapest commercially produced scientific books, but in 1933, with an addition to cost of 23.3 per cent, the price of 0.74 cents a page exceeds the cost of British books, which now are cheapest in the list.

We have not included in this comparison non-commercial books, such as Government publications the primary purpose of which is presumably propaganda for the good of the nation as a whole, for which end they are subsidised. Comparison of prices throws some light upon the value placed by governments upon the value of scientific work. U.S. Government publications are by far the cheapest in the whole list of publications, at 0.17 cents a page, for the encouragement of the application of scientific results, whereas the cost of British Government publications is 1.39 cents a page, *more than twice the price of commercial books*, and approaching very near to the cost of German books, which are the most expensive in the list. It would seem that either H.M. Stationery Office is inefficient as a producer of books, or that our Government does not consider the results of the work of its scientific staffs sufficiently valuable to be set before the public in the way deemed desirable in the United States. We suspect the presence of both adverse influences; but in any event it is difficult to understand why there should be this difference between the commercial price of British scientific books and the British Government price.

As to the discrepancy between the book prices of different countries: in 1933, while the French price rose 23 per cent, the German price fell 10 per cent, and yet in spite of that readjustment the

price of German books is almost double that of French, 1.43 cents against 0.74 cents a page. The German prices for medical and scientific publications are so great in comparison with those of other countries (except British Government publications) that probably every scientific institution in the world has been discussing the matter as one of the serious library problems it has to face. There are several disturbing features. So great is the discrepancy that in most libraries of reasonable size a very large proportion of the annual grant for periodicals (two thirds or more in U.S.A. libraries) is swallowed up by expensive German publications chiefly in the hands of one or two large firms, leaving a third or less for periodicals from the rest of the world. That proportion clearly bears no relationship to the relative scientific value of the journals in question.

"The cost of some of these journals has now reached as high as 90.00 to 173.00 dollars a year, and as no definite yearly subscription price is announced, the subscriber cannot know beforehand what he will be called upon to pay." There is a remedy; it is a drastic one, but after mature consideration it has been adopted and recommended by the Medical Library Association, on the advice of a special committee which it appointed to inquire into the situation.

We quote in full the resolutions, as passed by the Association (*Science*, 78, 139; 1933); they may be helpful to the curators of libraries of scientific periodicals in Great Britain, suggesting that by co-operation an end may be put to what is no less than extortion, an exploiting of scientific workers, because of their desire to give due weight to the scientific results of every country.

"1. It is recommended that no library subscribe to any periodicals that do not have a fixed annual subscription price for the entire annual output of volumes or parts. That such price be stated in advance, and also a statement of the number and parts to be issued per year.

"2. That the Committee on the Cost of Current Medical Periodicals be empowered to invite the various library groups of this and other countries to co-operate with us in the above-mentioned and other measures, necessary to establish more equitable prices for medical and other scientific journals, and that the approach to library organizations in other countries be made first through the president of the International Federation of Library Associations.

"3. We believe there is a widespread opinion that there must be a substantial reduction in extent of, and in subscription prices for, the most expensive medical and other scientific periodicals,

and we further recommend that, unless definite word to this effect is received prior to renewal of subscriptions for 1934, libraries cancel their subscriptions to the most expensive journals, except one library in each of 6 to 10 zones throughout the United States and Canada."

Some of our British universities have found the strain of German periodical subscriptions to be so great that they have already drastically cut down the list. But isolated action penalises the pioneers and may not be sufficiently cumulative to have the effect desired; whereas co-operative action, even throughout the English-speaking world, could scarcely fail to bring about a more reasonable attitude on the part of the publishers concerned.

J. R.

### Protozoology in the United States

*The Biology of the Protozoa.* By Prof. Gary N. Calkins. Second edition, thoroughly revised. Pp. xii+607+2 plates. (London: Baillière, Tindall and Cox, 1933.) 37s. 6d.

THE first edition of this book appeared in 1926, and was favourably reviewed in these pages at the time (*NATURE*, 118, 763, Nov. 27, 1926) by another hand: and since this new version is described as "thoroughly revised", one turns to it with confident hope that the shortcomings of the earlier volume have been, in the main, remedied. According to the author's preface, the chief amendments are as follows:

"After the first introductory chapter we plunge at once in Chapter II into the substances and structures of the fundamental organization. This is followed . . . by the development of these substances and structures into cytological derivatives (Chapter III) and taxonomic structures (Chapter IV) of the derived organization. In Chapter V the general physiological activities are considered in anticipation of Chapter VI on reproduction. The problem of general vitality and its significance in fertilization and the accompanying phenomena of sex differentiation, maturation, reorganization, adaptation and variations are treated in Chapters VII, VIII and IX. The special chapters on taxonomy, together with more elaborate keys to genera, are transferred from the middle of the book to the end in Chapters XI, XII, XIII and XIV."

This second edition also contains a new chapter entitled "General Ecology, Commensalism and Parasitism". As the author truly says, "Parasitism and disease should be considered in any work on general biology. These topics were omitted in the

first edition but are introduced here in Chapter X". In this chapter is included a discussion of the dysentery amoeba of man (*Entamoeba histolytica*), in the course of which the author insinuates that the present reviewer comes "rather close to unfair dealing" in his interpretations of history and nomenclature. This charge should be answered at once, as it has already been singled out for commendation in the United States. But it will suffice to note that Calkins's other allegations are here often clearly incorrect, and his conclusions demonstrably wrong. For example, he tells us that Lösch, in his classical case of amoebic dysentery, "found an abscess of the liver containing amoebæ": he gives Councilman and Lafleur credit for modern views which they did not express: and he concludes, apparently, that the correct name of the parasite in question is "*Endamoeba dysenteriae (histolytica)*"—an unorthodox combination in which every term appears to be unjustifiable. It may be noted further, as evidence of the author's own fairness and impartiality, that he finally assigns the reviewer's discovery of the complete life-cycle of the parasite *in vitro* to two later American imitators. Calkins is obviously unfamiliar with this branch of his subject, and his excursion into it seems therefore regrettable.

Unfortunately, many other pages in this book invite similar criticism. The "thorough revision" which it has undergone has neither brought it reasonably up to date nor corrected scores of factual mistakes in the first edition and its precursors. Proper names are still too often misspelled, or printed without their diacritical marks: no magnifications are noted for most of the figures, so that composite pictures are likely to delude the uninstructed (for example, Fig. 4, p. 23, where a *Chilomastix* cyst appears as large as an adult *Euglypha*): it is scarcely ever indicated whether the illustrations show living or fixed and stained specimens: the fabulous figures of "mitosis in *Endamoeba coli*" (Fig. 26, p. 53—rightly claimed as "original") are still unblushingly displayed: and the bibliography is still carelessly done and unrepresentative. Many authors are hardly treated, and the references as a whole are still inadequate. As an example, it may be noted that Wenyon, our leading protozoologist—whose name was omitted altogether from the "Bibliography" in the first edition—is now credited with only two publications, both bibliographically inexact. Most other living English protozoologists are ignored. The "more elaborate keys to genera",