

who has also a professional occupation outside the college, is made responsible for history, economics, mental science, currency and banking, and economic geography, and he has the control of the School of Commerce: this is fair neither to himself nor to the students. In Otago no provision is made for the teaching of history other than constitutional history.

Economics.

In Otago a lecturer takes this subject together with accountancy law: the arrangements in the other colleges are noted under the head of "History." Whether they are regarded from the point of view of politics, sociology, and commerce, or from that of a general human interest consequently as elements of a humanist training and culture, history and economics appear to be subjects of sufficient importance to deserve two separate chairs in a University College: it will be noted that in the University of Sydney there are distinct chairs of history and economics. Perhaps, however, the arrangement made in Melbourne of having one professorial chair and one lectureship is the best that can be made at present at any New Zealand University College, and I recommend that accordingly.

Mental Science.

Mental science and philosophy, together with logic and ethics: The wide extent of the subjects grouped under this head, the extensive reading that a teacher must do to keep abreast of his work, and the new developments of the subjects (in experimental psychology and so forth) render it desirable that if this branch of study is taken at all in a University College it should be the sole concern of a professor, who should have the assistance of a junior lecturer or laboratory demonstrator. Those who direct the changes necessary from time to time in educational systems and methods should certainly not be ignorant of the leading principles of psychology, logic, and ethics: hence it is difficult to see how mental science could be omitted from the programme of any University College.

Mathematics.

The importance of the subject may be taken for granted: although it is no longer compulsory for the B.A. degree, yet it is still required in the ordinary science course; and, though the number of advanced mathematical students in any community is from the nature of things small, yet the maintenance of higher teaching in the subject is necessary for its own sake and for the advancement of our knowledge in physics. The ramifications of mathematics in the higher branches are so many that, despite the comparatively small number of advanced students, it hardly seems possible to make a smaller satisfactory provision than that obtaining in Victoria and Canterbury Colleges—namely, that of a professor and an assistant: in each of the other two colleges there is a professor, but no assistant.

Physics.

At present physics and chemistry in Auckland are under the charge of one professor, who has a demonstrator and assistant. In the other colleges there are separate professors of physics and chemistry, each of whom has one assistant, senior or junior. In Otago both subjects up to the Intermediate standard are required for medical students.

The ideal arrangement for each of these subjects would no doubt be, as has been suggested—One professor; one chief demonstrator, who should also take some of the junior lectures; one lecture-assistant, to prepare the experiments for the lectures of the professor, and perform other duties; junior demonstrators (ex-students or senior students), as required; one mechanic, to make and prepare apparatus (he would probably save his salary by the saving of the expenditure that would otherwise be entailed for purchases and repairs); one cleaner and caretaker. The last two might also do similar work for the Professor of Chemistry.

Looking, however, to the number of students and the limited resources at our disposal, we ought probably at present to content ourselves with one professor, one chief demonstrator and lecturer, and one junior demonstrator, together with a mechanic; one cleaner might, perhaps, suffice for all the science departments.

Biology

(Including general biology, botany, and zoology; the cognate subjects of physiology and anatomy are for the purpose of this list included in the medical course).

In each of the four colleges there is a Professor of Biology, who takes both the botany and zoology. In Auckland the Professor of Biology also lectures on geology, and is consequently overweighted. In Auckland and Canterbury the professor has an assistant or demonstrator; in Victoria College he has both an assistant and a demonstrator; and in Otago (where biology is a compulsory subject for the Medical Intermediate Examination) the professor does his work unaided. It is seldom that one person has an equally good knowledge of both botany and zoology; hence, if the professor's special province is the former, there should be a lecturer whose strength lies in his knowledge of zoology, and *vice versa*—otherwise the advanced students in one branch or the other must suffer. For a similar reason there should be at least two demonstrators (senior or junior) one for each branch. With the actual number of students we must probably at present content ourselves with junior demonstrators: the ideal would be to have at least one senior demonstrator and junior demonstrator as required in each branch.

Geology.

This subject, so important in a new country whose mineral resources are only partly known, and where so many scientific problems call for solution, is comparatively neglected in New Zealand. There