the increased reputation of the worker which would be acquired by one complete and authoritative paper. Most journals do not make full use of their competent editorial boards, who must co-operate with the contributor and the publisher to attain this desirable objective.

2. Much space is occupied by a long list of references to previous authors, and many of these can be eliminated by a single reference to what we term a 'key paper'. Where a good paper on the subject with a full historical bibliography has already been published (for example, in *Physiological Reviews*, or a monograph) this could be quoted in lieu of repetition, papers subsequent to this only being cited. Such 'key references', in these days of special-isation within subjects, inflict no hardship upon the interested reader and would avoid the full list of references being given every time.

The 'key reference' would reduce the long preamble setting forth the reasons for undertaking the particular line of research, and would yield a concise statement of method and results.

Failing a ready-made 'key paper', the complete and authoritative paper previously mentioned would thereupon automatically become the 'key paper' on that particular subject.

3. Abstracting journals are published mainly in English and in German, and it cannot be claimed that both are essential. Where a full abstracting service is available in one language (for example, in the *Ber. ges. Physiol.*) this should adequately cover the field and absorb or replace all others. It is no longer a valid excuse that German is not known by English-speaking workers, as a working knowledge of both languages is part of a scientist's equipment.

If a full abstracting service does not exist for a subject, we recommend the excellent system adopted by the Royal Microscopical Society, which publishes, as an appendix to each part of its journal, abstracts from articles appearing in other journals on cognate subjects. If this practice were made a general one, a saving in bulk and binding would accrue. For example, the Physiological Society by printing its abstracts in the Journal of Physiology might (although slightly enlarging the size of the journal) eliminate its second periodical, Physiological Abstracts. If the Society did not adopt this procedure, which we term 'telescoping', it might save space by excluding all abstracts from articles in its own Journal of Physiology.

4. 'Telescoping' could usefully be employed in removing redundant publications. The American Journal of Physiology could coalesce with the Journal of General Physiology, the gain being the heightened standard of the articles.

Some societies, including the Royal Society of Arts and the Royal Society of Medicine, print papers *in extenso* in their journals when a résumé would usually be preferable : they also print *verbatim* the vote of thanks proposed by the chairman (the inclusion of which is tedious and unnecessary), as well as the ensuing debate. Excision of these would reduce the journals in question from unwieldy tomes to volumes of handy size.

The instructions for the reduction of bulk which were issued by the firm of Springer for their periodicals have already been abstracted in NATURE¹: these might serve as a model in Great Britain and the United States.

University and Educational Intelligence

COLLEGE HALL, London, founded in 1882 to provide residential accommodation for university women students, has been greatly enlarged in the past four years. Its recently issued annual report includes a detailed account of the opening of the "Mary Brodrick" wing by H.R.H. Princess Alice on November 15. With this addition, the Hall is able to house 172 students. It fulfils an important imperial and international function in facilitating social intercourse between students from different parts of the Empire and from foreign countries. Its financial stability is, for the present, assured, but there is still a substantial debt to be cleared off, and the Council is especially anxious to do this at the earliest possible date so that it may increase the number of rooms let at reduced rates to impecunious students and build up a reserve fund for the purchase of the freehold of the site.

SECONDARY school problems in the United States are discussed in an article by Prof. D. Snedden, of Teachers College, Columbia University, in School and Society of February 16. The four-year high school, he says, tends rapidly to become a school for the whole of the population (9 millions) between 14 and 18 years of age. Already in 1934 two thirds of this population was in full-time attendance. Except as regards what he calls their pseudo-vocational courses, the high schools are still excessively under the spell of college entrance requirements. Changing family and economic conditions render increasingly profitless any serious vocational training begun before the age of eighteen or twenty years, and such vocational education as the high schools can offer is practically valueless. Hence an urgent necessity for devising high school curricula that shall enable these vast armies of pupils to be adequately prepared for finding themselves amid the modern world's welter of products of printing press, camera, phonograph, laboratory and shop. A few suggestions are offered, starting from the assumption that there must be at least three parallel sets of courses for the exceptionally gifted, the average, and the sub-average pupil.

THE Carnegie Trust for the Universities of Scotland held its thirty-third annual meeting on February 6. Among the outstanding events of the past year the report records the death of Lord Sands, its chairman since 1922, when he succeeded Lord Balfour of Burleigh. His place has been taken, since last July, by Sir H. Arthur Rose. Grants to universities and extra-mural institutions are distributed by the Trust quinquennially, the last distribution, for 1930-35, having allocated £259,025, to be spent on libraries (£29,725), buildings and equipment (£184,600), and endowment of teaching and other general purposes (£44,700). Of the Trust's activities under its scheme of post-graduate study and research for 1933-38, the report observes that since awards were intimated last July, there have been many resignations on account of acceptance of salaried posts-a sign, it is hoped, of improved economic conditions in the country. Assistance in payment of class fees for 1933-34 absorbed £56,348, the number of beneficiaries being 4,017. Forty former beneficiaries voluntarily repaid to the Trust during the year sums amounting in the aggregate to £1,658, including a remittance of £300 from one whom the Trust had assisted to the extent of $\pounds 100$ only while he was a student in 1902-6.

¹ NATURE, 132, 34, July 1, 1933.