

must be qualitative. It is possible to argue, for example, that in spite of over-investment in high energy physics in the recent past it would now be folly for the British government to contract out of the business altogether. To begin with, there is important work in progress. Several university departments have been fashioned round the subject, while the intellectual investment in the operations of CERN at Geneva is too great to be dismissed.

A decision to change course on issues like this would leave scars on British scientific life that would almost certainly be permanent. By the same test, with all the efforts spent in the late sixties on the encouragement of astronomy, it would now be foolish to neglect the opportunities that have been created and also absurd to invite the people concerned to make their homes elsewhere. But the same things can be said of British work

in molecular biology, genetics, and a host of other fields. It is also clear that there is a need deliberately to encourage scientific research when there are industries crying out for technical support of one kind or another. In short, there are perfectly tangible if qualitative reasons why there should be a deliberate attempt to encourage scientific research of particular kinds in the long term. The government, fair play, is sufficiently preoccupied with principles of good management to sponsor all kinds of reviews of the machinery used for the administration of scientific research, but what really needs to be accomplished, not necessarily by the government as such, is a comprehensive review of those parts of scientific research which cannot be neglected in the years ahead. Until that is carried out, there will be no way of demonstrating that the present intention to allow basic research for practical purposes to decline is mistaken.

Living and Partly Living

THE Architectural Association, the independent school for the training of professional architects to which a great deal of the British architectural profession owes its allegiance and even existence, is now more than ever in hazard. Two weeks ago, its second appeal to the Inner London Education Authority for recognition (and support) as a college of higher education was turned down. Evidently the authority considers that it already spends enough on educating architects, and there is much in that. In retrospect, it must be galling to all concerned to recognize that it might by now have been possible for the Architectural Association to have forged some link with London if it had not chosen, instead, to waste several years on negotiations with Imperial College which eventually proved abortive. Although it is not clear why the attempt to make the Architectural Association into an institute of Imperial College failed, especially because it seems even in retrospect that the architects and the engineers would have had a lot to say to each other, the chances are high that the association's experience then will be repeated in any future attempt to marry with an established university. At least one stumbling block is constitutional—the Architectural Association is governed (if that is the word) as much by the students as the faculty, but it is also a big mouthful for any university to swallow: 400 students in architecture could not be accommodated anywhere without disturbance.

So what is there left to do? In the past few days, the Architectural Association has been heartened to be told by its students that they at least would like to soldier on. Their view appears to be that the advantages of the distinctive education provided at the Architectural Association are so great that the risk eventually of seeing the institution shut down before their courses are complete is something to be lived with. The result is that, by all accounts, the association is now again proposing to tackle its friends to see whether it would be possible to raise a sum of money large enough to keep the familiar wolf from the door. In a funny way, and from sheer necessity, the association is trying to solve all the problems that confront or will confront the independent university if that should ever become more of a reality than it is at present. As such, the example in the next few months should be an important object lesson for lots of people. The association's problem

is that it has no direct support either from the University Grants Committee, which keeps the universities in being, or from a local authority as might a polytechnic. The result is that the real cost of teaching must be met either by fees or endowment income. The Architectural Association reckons itself to be a good housekeeper by its capacity to run its affairs for £600 per student per year, although the facilities which it offers for that would frequently provoke revolutions at other institutions. The fees charged to students are £460 a year, much larger than the nominal sums asked of students at universities and polytechnics, with the result that many local authorities are frequently less willing than they should be to help their students through courses at the Architectural Association. Even so, roughly three-quarters of the students are supported in this way. Evidently the margin between success and failure is comparatively narrow. At a time when most teachers complain of the apathy of their students, it would be a great misfortune if one of the places which they appear to relish should close down for want of benefaction.

100 Years Ago



THE *Scientific American* states that the Board of Trade of the city of Buffalo has obtained a franchise and organised a company to be styled the Oxyhydrogen Gas Company, having for its object the introduction of the oxyhydrogen gas light into that city. A committee of investigation has visited the oxygen gas works in New York, and with the information thus obtained we are informed that the work is to proceed at once. It would appear that Buffalo is to be the first city in America to adopt this splendid light. The experiment is an important one, and its success will be watched with considerable interest by gas consumers in this country and America.

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