has served not so much as a rallying point for those who espouse the new fad of zero economic growth but rather as a platform for those who insist that environmental problems are not soluble unless more resources are available, that there is in any case no necessary conflict between economic growth and the careful management of the environment, and that, in any case, the most serious environmental indignities are not those of pollution, however international, but those of poverty, disease and unjust government. This is the point that Mrs Gandhi, the Prime Minister of India, made when she reminded the delegates at Stockholm last week that in India the environmental problems first to be solved are those that afflict the millions of people living on the pavements of Calcutta and Bombay. But the mood of governments may also have been changed by the insistence of the developing countries that economic development is for them a more urgent cause than the preservation of the environment. Nations elsewhere should take this lesson to heart. The developing countries are neither feckless nor short-sighted. The truth is that if what advanced societies hanker after is a decent environment, they must first set out to create a decent world. This will not be possible so long as they remain as mean and short-sighted as they were at UNCTAD at Santiago six weeks ago.

## **Academic Roulette**

Professor Edward Nevin has started some troublesome hares in an article in the current issue of Economic Journal (82, 658; 1972) with the title "How Not to Get a The raw materials of this subversive study are the records of British universities showing the proportions of first graduates awarded honours degrees of various distinctions. (Readers elsewhere should know that undergraduates following honours degree courses, if successful in their final examinations, are lumped by their examiners into four categories, classes I, II-1, II-2 and III. A man or woman with a first-class degree walks tall; a third-class person usually spends his time telling his employers of his activities with the university campanologists and the like.) Because of the way in which degrees are labelled and because of the potential value of particular classifications to individual careers, there has in the past few years been a steady rumble of concern among students and teachers about the differences of practice between different universities and between different faculties within the same university.

Professor Nevin's analysis confirms the common suspicion that universities differ markedly in the generosity with which they award distinctions to first graduates. In pure science subjects, for example, the percentage of first and upper second honours degrees awarded by British universities between 1966 and 1969 ranged from 32.1 per cent at the University of Essex to 59.7 per cent at the University of Kent. In the social sciences, a student's chances of picking up a distinguished degree are even more a matter of pot luck. The University of Wales Institute of Science and Technology seems to have been exceptional in awarding only 8.9 per cent of first and upper second degrees to students reading social sciences between 1966 and 1969. Elsewhere, the corresponding percentage appears to have ranged from 22.5 per cent (at the University of Bradford) to 70.7 per cent at the University of Kent (evidently the university most anxious to give its young men and women a good start in life). At the University of Cambridge, examiners are more fierce—the percentage of students in pure science emerging in the two upper classifications of examination lists was 37.8 per cent, compared with 34.2 per cent in the social sciences.

Why should there be such variations between different universities? On the face of things, there is nothing in the figures to suggest a general rule. The hypothesis that newer universities which have grown quickly, or departments which have grown quickly, may contain unusually large proportions of young people among the teaching staffs, and that they might on that account be wantonly mean to their students, is contradicted by the observation that the newer universities tend to be found at the top and the bottom of the percentage tables. So is it possible that the variations now identified spring from objectivity among examiners and reflect a variation of the quality of university entrants or of the weeding out process which That conclusion would bring precedes examinations? joy to those who hold that university entrance procedures, based as they are on the performance of intending students in A-level examinations, are inherently faulty. But more sceptical analysts will point out that it is unreasonable to suppose that autonomous boards of examiners, recruited in the way which has become familiar in British universities, will be anything like as consistent.

How disturbing is all this? The first thing to be said, of course, is that the class of the degree which a student is awarded is often strictly irrelevant to the question of his suitability for the particular jobs for which he may afterwards apply. In Britain, employers such as the Civil Service have long recognized the truth of this simple proposition—they hold their own examinations. Equally, academics selecting potential research assistants do so on the basis of a personal assessment of a student's flair for research (which is not to say that this system is entirely free from nepotism and a tendency to perpetuate the prejudices of university teachers in research). And discriminating employers are increasingly inclined to follow the same tack, suiting people as far as possible to the jobs which they might do. For all these reasons, the attempt by university examiners to wield Occam's razor once a year is increasingly of interest only to themselves.

## **100 Years Ago**



Spectrum of Lightning

I HAD a good view of the spectra of lightning during the storm of yesterday. Frequently there was only one bright line visible, this being coincident with the nitrogen line. At other times there were several bright lines, sometimes with, and at other times without, the nitrogen line. Several flashes showed a continuous sprectrum without visible lines. My instrument was a small direct-vision spectroscope, but sufficiently powerful to divide the sodium line.

J. P. JOULE

Broughton, Manchester, June 19

From Nature, 6, 161, June 27, 1872.