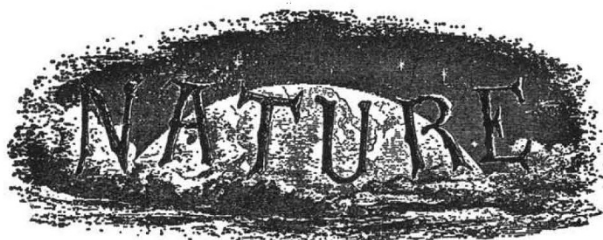


the exigencies of administration. Nobody will deny that even the most enlightened universities are more tongue-tied than they should be in ways like these.

What does this imply for cases like that of Mr Arblaster? To begin with, there needs to be some mechanism within all universities by means of which contentious appointments can be openly discussed within the faculty. Inevitably, proceedings like this are bound to seem painful to many people, which is why they have no doubt been avoided in the past. The chances are, however, that on occasions like this, it would be necessary for both sides to put their point of view, and academic communities being what they are, there is some chance that one side might be able to persuade the other. The alternative is not some painless democratic procedure such as the Council for Academic Freedom describes but the present lazy tendency to delegate unpleasant tasks and decisions to those who are administratively inclined. In short, the complaint against the universities is chiefly that the academics are not sufficiently vigorous in the management of their own affairs.

100 Years Ago



The Cockroach

IN some ships infested with these insects, sailors frequently complain of having their toe and finger nails, and the hard parts of the soles of the feet and palms of the hands, nibbled by them. The men have exhibited to me their nails and skin, which had the appearance of having been attacked. I can vouch for the following, as I was the unhappy subject of it. On returning from a shooting excursion in salt swamps in tropical Australia, with my feet blistered and sodden, I was put to sleep in a room swarming with cockroaches (the small species). The night was intensely hot, and my feet were exposed. I had slept soundly for some hours, when an intolerable itching and irritation about my feet awoke me. I felt these objectionable insects running over and gnawing at my feet. On striking a light, I found they had attacked the skin, and entirely eaten it away from a large blister, leaving a raw place as large as a shilling. I slept again, and in the morning found they had completed the work, and established a painful sore. The whole of the hard skin on the heel was also eaten down to the pink flesh. The nails were not attacked. I have now, at a distance of four years' time, bluish scars on the skin

Mill Hill, Nov. 11

ARTHUR NICOLS

From *Nature*, 3, 108, December 8, 1870.

Cockroaches

THE facts mentioned by your correspondent, Mr. Arthur Nicols (in your number of Dec. 8), are notorious to all West Indians. A friend of mine was marked for life by these things on board a ship coming home from Jamaica.

As for their scent, if you crush one in England it smells evil enough; and I don't doubt Aristophanes's sharp Greek nose had found that out. I have known bread, &c., in the West Indies uneatable from being run over by the small dark Cockroach of England, *Blatta orientalis*; while the great pale species, *B. occidentalis*, is utterly unbearable.

C. KINGSLEY

From *Nature*, 3, 148, December 22, 1870.

OLD WORLD

POWER CUTS

Science in the Dark

THE power cuts which have caused much personal inconvenience in Britain during the past week or so have also had serious implications for many science based organizations, such as pharmaceutical firms, which will suffer serious after-effects as well as immediate troubles. University science departments, on the other hand, seem to be coping adequately with the crisis.

Professor P. T. Matthews, head of the Physics Department at Imperial College, London, for example, has described the power cuts as "a nuisance", pointing out that several experiments have been shut down and that, on the whole, new experiments have not been started. The chief worry is that research students working to tight schedules will inevitably find themselves several weeks behind in their experimental work. But damage to expensive equipment is much more easily avoided in the present situation in which cuts are expected, rather than when sudden power failure occurs when equipment is unattended. And in chemistry departments, the story seems to be very similar. At University College, London, Professor Sir Ronald Nyholm speaks of "inconvenience" to research workers, and of experimental work being "deferred rather than ruined". Research workers engaged in experiments lasting a week or two and performed, say, at a constant thermostatically controlled temperature clearly stand to waste more time and effort than those engaged on shorter experiments.

Some scientific work at universities has fortunately not been affected at all by the lack of electricity. The Nuffield Radio Astronomy Laboratory at Jodrell Bank, for example, has been operating normally because most of the sensitive electronic equipment is powered by diesel generators as a precaution against the normal fluctuations in the electricity supply.

Some branches of science-based industry, certainly, look very much less happy than the universities. The Association of the British Pharmaceutical Industry (ABPI) points out that the power cuts have had a serious effect on drug production. Even short power interruptions can interfere drastically with the sterile air supply to filling and packaging areas and re-sterilization of these areas can often take as long as a week. Large scale chemical processes can become dangerous because of the breakdown of stirring or cooling facilities, for example, which ultimately causes the abandonment of quite long production runs. The overall effect, says the ABPI, is curtailment of production of key products, including hospital supplies. Some individual companies do, however, seem to have fared better than others; the Beeching group report that their pharmaceutical plant at Worthing, where the company manufactures large quantities of penicillin drugs, has managed to maintain production by making a voluntary cut of 50 per cent in power consumed throughout the factory.

The use of computers (ranging from payroll calculations to on-line production control and scientific research) has also inevitably suffered from lack of power. The principal trouble seems to arise after the