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Scientists' manners

Sir,—The new Bishop of Durham is reported to have become concerned about "the elitism of those scientists who feel superior in their world-view, arrogant in their comprehensive view of the universe and over-confident of their importance as prime forces in shaping the world" (In person, 26 April, p 210). D. J. Pullin (Letters, 26 April, p 246) gives a good example of such elitism and arrogance. Even if one admits the validity of his contention (and I would only do that after considerable qualification), there is still the point that criticisms need not be presented in offensive ways. I doubt if many scientists would remain unoffended if their theories were given the sort of treatment Mr Ryan (Feedback, 29 March, p 735) gave Islamic beliefs. People are sensitive beings and one should treat them as such even when disagreeing with them, especially if you consider yourself to be more "enlightened than most of them. Maybe science would appear a more humane subject if more scientists experienced a conversion such as John Habgood's.

E. C. Lucas

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Powder mills

Sir,—Referring to your interesting article on Faversham Powder Mills (Forum, 12 April, p 112) and Mr S. U. Belsey's reminiscences (Letters, 26 April, p 245), I also was in school at Faversham but at the earlier period of 1891 to 1895, at which time the mills were in full production. During that period a heavy explosion occurred in one of the "green-charge" buildings a mile or two from the town, and the boom called the townspeople from their homes and shops to witness the huge column of black smoke boiling and surging. As the buildings had very thick walls and a flimsy roof and were out-of-bounds to workers during certain processes, risk to life was not as great as might be expected. There was a large sheet of water in the park surrounding the mills and rumour had it that this had been artificially formed in order to render harmless some explosive that had become too dangerous to handle. There were no restrictions on the purchase of explosives in those days and black "sporting" powder, which cost I believe about one shilling per pound was used in the old muzzle-loading guns, many of which were still in use.

During the exceedingly long and hard winter of 1894-1895 the lake mentioned above was frozen over for many weeks, I and many others were privileged to use it for skating and the long period was sufficient to allow a beginner to acquire a fair degree of expertise. One of the busiest thoroughfares in Faversham was bisected by the London, Dover & Chatham Railway, and vehicular traffic—all horse-drawn with the exception of traction engines with their train of trucks carrying coal or timber from the wharf—had to await the grinning

of the level-crossing keeper. When I left Faversham in 1895 this level-crossing in Preston Street was still in operation.

G. E. Mortley

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Breeder accidents

Sir,—Jon Tinker (Letters, 19 April, p 180) does not seem to have understood my letter. I guessed that a few hundred radioactive deaths or serious illnesses might result from a breeder accident, equivalent to those killed every few days by the normal burning of fossil fuels in Britain, and challenged him to show how as many as 10 000 could result. His suggestion of 10-100 million is not merely too high but quite impossible. The whole point of my letter was that an obvious nonsense statement would merely prevent from listening anyone competent to do the needful calculations, and would not provide the stimulus that sensible fears should provoke.

On the other hand, he seems not to have noticed that I was agreeing with him that it would be dangerous to have large quantities of military grade plutonium shipped around where it might be hijacked. This may have been my fault. I should have said *if* the fertile blankets of breeders contain a suitable

proportion of the equilibrium plutonium isotope mixture derived from used breeder fuel, then the military grade plutonium would never be produced and the fresh breeder fuel rods *would* not be of military grade. Instead, I said that this *will* be the case. This was perhaps optimistic, but it does seem an obvious precaution; simple to carry out and no more difficult to control by inspection than are the currently conventional reactors. Indeed, it would seem worth while to get the fuel rods of conventional reactors similarly pretreated, when enough breeder reactors are running to produce the needful heavy isotopes of plutonium.

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Psychologists reply

Sir,—We regret that because of the "high cost of railway tickets" Donald Gould was unable to attend the recent conference of the British Psychological Society at Liverpool. We also regret that despite his non-attendance, he felt himself to be in a position to describe the findings of our study of teachers at a provincial university as "obvious" (Forum, 19 April, p 170). One point which

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