

It is not, I hope, a serious contravention of the Official Secrets Act to reveal that, in Committee Room 11 in the Houses of Parliament, the wall above the rostrum is adorned with an enormous oil painting which depicts "The Speakers Procession in 1884". The Parliamentary and Scientific Committee sometimes meets in this room, and when the proceedings are less than enthralling I find myself studying the picture. My interest is not so much in attempting to identify the impressive figures (the print on the key diagram is too small to be read at a distance) as in wondering at the appalling mess of litter and waste paper through which the procession is wading. It is almost like the platform of a London underground railway station in 1975. I am glad to say that the corridors of power are, in this respect, more hygienic today, if other places are becoming filthier.

Litter and refuse are undoubtedly providing some of our most difficult pollution problems today. Both New York and London seem to be permanently subject to piles of stinking refuse, even when there is no industrial dispute between the local authorities and the refuse collectors. Earlier this year the strike of dustcart operators in Glasgow faced the city with a serious public health problem, so that the army had to be called in to clear away the more noisome dumps. The problem is made worse by the way in which the bulk of the litter is swelled by masses of unnecessary packing material, but its danger is also a function of affluence, for it is the waste food, much of it initially quite fit for consumption, that makes refuse a public health problem, attracting rats and increasing the risk of transmission of disease.

What may not be generally realised is that it is the successful control of air pollution which exacerbates the problem. Earlier this century the volume of refuse was much smaller, partly because much was burned on domestic grates and kitchen ranges.

It is true that some of the more

affluent do have refuse disposal units, to pulverise food and some other wastes, which are then discharged into the sewers. This may allow their hygienic disposal, though there have been reports from America of a consequent overload of sewage works and even more serious pollution of rivers when the material is discharged, untreated, into them. We are often better at moving pollution from one place to another than in curing or controlling it.

The Chief Scientist to the Ministry

Waste line



KENNETH MELLANBY

of Agriculture, Fisheries and Food, has recently stated that, of the food bought in Britain, as much as a quarter may be wasted. This does not include the substantial amount that is eaten, over and above their actual requirements, by most of our population, contributing to the obesity which is the most serious symptom of malnutrition in most Western countries today. It seems likely that, if we eliminated waste and gluttony, we could reduce our balance of payments deficit by nearly £1,000 million, without any marked change in our feeding habits.

Although there is a growing interest in recycling all types of waste material, little food is re-used in this way. In the past, much pig swill came from hotels, schools and even from private houses. Since swine vesicular disease has

become a serious problem, such collections of swill have greatly decreased, as regulations to ensure that the food is properly treated and sterilised, though wise and necessary, are too stringent for the majority of small operators. It is calculated that the dustbins of Britain contain at least 3 million tons of "putrescible material" (the trade jargon for waste food) a year, much with a high protein content, and that if this were properly treated it could feed more than 1 million pigs—as well as reducing the health risks arising from uncollected refuse.

If waste food is to be used to feed animals, it has to be separated and treated. There are less difficulties in recycling refuse as a soil fertiliser or conditioner. Considerable amounts of sewage sludge are used in this way, and several cities have installed elaborate and expensive plant to produce municipal compost. Wastes brought in by the dustcarts are sorted and separated (tins and iron scrap is removed magnetically, baled and sold) and the remainder, with added sewage sludge, goes through a digestive process. The end product is a brown powder which is quite pleasant to handle. It contains a significant amount of nutritive salts, and is an excellent conditioner for intractable clay soils. Although available at a low cost, most farmers have been reluctant to use municipal compost, because it usually contains substantial amounts of heavy metals, the lead level commonly exceeding 200 p.p.m. There is evidence that, in the presence of a high level of organic matter, this lead is hardly taken up by most plants, but it does remain in the soil and might give rise to problems at a later date if the organic level fell substantially.

Waste disposal and re-use is thus seen to be a very complicated problem. Clearly the best solution is to produce less, and to see that what cannot be avoided does not give rise to further problems. But it is at least encouraging that our present Members of Parliament are better house trained than their Victorian predecessors.

design an acceptable clinical trial without depriving patients of other, accepted methods of treatment. In other words, if Laetrile were put on clinical trial, it could only be justified ethically if it were simply added to other forms of treatment, and that wouldn't make for a very rigorous test.

There is, however, another extremely important aspect to the Laetrile debate. Laetrile, in its purified form, is relatively non-toxic. It can be fed to animals in large doses before any adverse effects are noted; according to Thomas, at least one of the "solid

pieces of data" to come out of the SKI studies is confirmation of that fact. Laetrile proponents therefore argue that FDA should not regulate the substance as a drug, but as a food or even a vitamin.

Would it do any harm if the FDA were to allow Laetrile to be marketed like any other so-called health food? Even the *New York Times* has suggested, in an editorial published in August, that since Laetrile is usually taken by cancer patients who are beyond help from conventional therapies, they should not be denied even a

possible placebo effect from the substance. But a letter from Dr Sherwin Gardner, Deputy Commissioner of the FDA, took exception to that suggestion. Pointing out that the FDA has a duty to protect the public against ineffective drugs, Gardner said he believes that "the idea of fraudulent promotion and sale of bogus cures to the desperately ill and dying is appalling". It is also argued that, if Laetrile is made more widely available, it will be taken by cancer patients in preference to other therapies which have at least proved effective in the past. □