Meadows and his colleagues leans in this direction, the Club of Rome itself has only generalities to offer. It asks for "radical reform of institutions and political processes at all levels" without saying what kind of reforms it has in mind. It asks for international planning on an unprecedented scale without saving what arrangements there should be for making plans and agreeing on them. And it asks for what the old evangelists would have called a change of heart without itself displaying a sufficiently sensitive understanding of the way in which society functions to compel the allegiance of those outside the Club of Rome. Mr Peccei and his colleagues in the club should try to do better next time, and they should recognize that in present circumstances, as in the past, the prophecies most likely to be listened to are those which are accompanied by constructive suggestions about what to do. This, unhappily for them, requires more than mere computation.

Which Ducks are Lame?

On the face of things at least, the British Government appears to be in rapid retreat from its declared policy that industry must learn to stand on its own feet. Mr John Davies, Secretary of State at the Department of Trade and Industry, let it be known soon after he came to office that industrial lame ducks could expect no help from him. His supporters are understandably chagrined that last week he agreed to provide £35 million as a subvention for the company which has been set up to try and make a success of the shipyards on the upper Clyde and that this week he has agreed to provide £100 million by way of subsidy for the National Coal Board as well as increasing its borrowing powers from the Treasury by another £50 million. The fact that the price of coal will also be increased by $7\frac{1}{2}$ per cent is, of course, a simple consequence of the Wilberforce pay award (see Nature, 235, 409; 1972). On the face of things, all this appears to be a great defeat for the government's policies even if one of the pressures with which the Department of Trade and Industry has to contend is the fear that a further increase in unemployment would be politically intolerable. In one sense, at least, the new subventions for British industry are ways of providing jobs for men who would not otherwise be economically employed. The truth, of course, is that in the short run there may be virtue in such a course of action, inflationary though it But a much more serious weakness in the government's policy is that it is doing very little to ensure that the jobs now being squeezed out of the British economy by competition from abroad are replaced by other ways of earning a living. On the long view, the most urgent need is for a constructive policy on industrial research and development.

What are the directions in which new opportunities should be sought? Where will jobs be found for all those who will be made redundant from the British coal mines in the years ahead, perhaps 50,000 people altogether? What will happen to those displaced from the shipyards when the subsidies have been expended? And what, in any case, is to be done to employ the million or so who are at present unemployed? Plainly, there is no sense in considering these questions in isolation from the

prospects of Britain's entry to the European Community less than a year from now. It is not too soon to ask whether civil engineering is properly organized to be competitive on a European basis. Although West Germany has what would seem to be a commanding advantage in heavy mechanical engineering, there is also much that could be done to strengthen the British companies which are traditionally strong in the manufacture of machine tools, for example. But there are plainly great opportunities in nuclear power if only the British industry can be cast into a competitive pattern and if, by intelligent research and decisive development, it can be given tangible goals at which to aim. And then, of course, there is the whole field of telecommunications where Japanese companies in the past few years have demonstrated quite clearly that both market and job opportunities exist. In short, there is no lack of fields in which new prosperity might be found. The problem which only the government can solve is to make them accessible.

Ironically, the sums of money now being spent to help Mr Davies's lame ducks are very much larger than those needed to give the industries concerned a proper sense of enterprise. The most obvious gap in the government's present arrangements for sponsoring development in forward looking industries is that there is no machinery for channelling funds for research and development into potentially profitable paths. So does it not follow that the most constructive escape from the government's present dilemma in its economic policy is the setting up of larger and more effective organizations for supporting industrial research?

100 Years Ago



DR. LIEBREICH, the eminent ophthalmist, of St. Thomas's Hospital, delivered a lecture at the Royal Institution on Friday evening last, on certain faults of vision, with special reference to Turner and Mulready. The later "aberrations" of Turner's style he attributed to a physical change in the refractive power of the eye, by which illuminated points were converted into illuminated lines. The change of manner in Mulready's later pictures he accounted for, in like manner, by increasing yellow degeneration of the crystalline lens. We hope in a future number to give a report of the lecture.

WE are very glad to be able to state that intelligence has just been received from Prof. Huxley that his health has already been greatly renovated by the pure air of Upper Egypt. He wrote from Thebes, and was then contemplating a visit to Assouan, from which he would probably have returned to Thebes before this.

WE understand that the Meteorological Committee have resolved to issue lithographed illustrative charts of the Daily Weather Report, which will be delivered in London, within a reasonable distance from the office of the printer in Lincoln's Inn Fields, between I and 2 P.M., or posted in time for the evening mails. Up to the 31st of March these charts will be supplied gratuitously.

From Nature, 5, 390 and 391, March 14, 1872.