

are losing money; last year the excess of expenditure over receipts amounted to £51,100, a little better than the figure for 1966 when the excess was £53,000. The Railways Board is not divulging figures for each museum separately, but York seems to be breaking even, while the Clapham museum is said to be running at a considerable loss. The plan is to sell the sites at York and Clapham and to use the money to obtain a new site at York. A locomotive shed at York station is under consideration. The road vehicles at Clapham—many of them at one time London buses—belong chiefly to the London Transport Board and are not to be transferred to York.

It is undeniable that the old tram depot at Clapham is not an ideal site for a transport museum. For one thing there is no railway to the museum, so the locomotives have to complete the last part of their journey by road with all the difficulties that this involves. By their nature, the locomotives and road vehicles need space to be seen to the best advantage, and the site at Clapham is beginning to contain more exhibits than it can reasonably hold.

But if the museum has to move, and it is by no means obvious that this is necessary immediately, it is worth finding another site in London. One idea has been to placate the preservationists by retaining St Pancras station, once it has closed down, as a monument to Gothic architecture and giving it a useful function as a railway museum. Until a new site becomes available, there are in any case plenty of museums which would be only too pleased to look after any of the 71 steam locomotives scheduled for preservation by the Railways Board some of which have not yet been housed. What is clear is that the country where rail transport started ought to have room for a railway museum in its capital.

BRITISH ASSOCIATION

New Members Wanted

THE General Committee of the British Association has drafted new rules for membership as part of a serious effort to solve its financial problems. At the general assembly which concluded the Dundee meeting last week, Sir Peter Medawar, the newly installed president, said that the council had realized that the association must become more self-supporting. The first objective is to stop subsidizing members' activities. As things are, attendance at the annual meeting is included in the four guineas annual membership fee, although it actually costs about £11 for each member attending the meeting. The new proposal is that ordinary membership should cost less but that there should be a more realistic charge for attendance at the meeting. Members will be entitled to receive the *BA Record* as part of their membership and will be able to obtain the other BA journal, *The Advancement of Science*, at a reduced price.

The hope is that these proposals—which will have to be approved by the privy council—will increase membership. To the same end, there is also a proposal to set up a British Association of Young Scientists (to be known as BAYS). All young people with an interest in science and technology will be eligible for membership. They will pay different annual subscriptions, considerably less than adult members, according to

whether they are full-sized BAYS, aged fifteen to eighteen, or junior BAYS, younger than fifteen. The intention is that BAYS will organize their own activities in branches throughout Britain with help from existing branch or area committees. The full privileges of the BA will be open to the young scientists, and the hope is that many more than the 200,000 who have recently been active in the BA young people's programme will be encouraged to join an organization which has so many distinguished adult members. A gift of £2,000 a year for three years has been given by the International Publishing Corporation to assist in the launching of BAYS. The activities of the young scientists are to be publicized in the journal *Science in Action* which IPC is to publish for young people fortnightly from September 19 this year. The BA has promised to put experts at the disposal of the editors to act as advisers and suggest contributors. It will be interesting to see who profits from this bargain.

These moves are all intended to increase interest in and thus the membership of the BA, which now stands at about 2,500. Whether they are successful remains to be seen. In view of the fact that other sources of income have not been forthcoming, the membership will have to increase dramatically to carry the BA out of its present financial doldrums.

COMPUTER BUREAUX

Code of Conduct

IN the United States, 35 per cent of computer service bureaux—firms whose assets are a computer and a staff of computer personnel—fail in their first year. Computer service bureaux in Britain are eager to avoid a similar situation, and their trade association, the Computer Service Bureaux Association (Cosba), has therefore drawn up a code of conduct to help its members and to protect their customers. The business of supplying computer services through bureaux is rapidly growing. The annual turnover of bureaux in Britain is at present £15 million and is said to be increasing by some 30 per cent a year. Last year, the bureaux realized they had no collective voice to air their opinion on matters vitally affecting them, especially the Post Office plan to set up a data processing service, so Cosba was founded in January 1968.

The code of conduct now published is mandatory on members of the association. There are also recommendations about standards of service which are not obligatory and a list of clauses considered suitable for inclusion in the contract between bureaux and clients. The security of business information crops up under all three headings, and it seems to be agreed that all information from clients will be treated as confidential. Cosba also reassures its members' clients that if a bureau fails to carry out a contract, another will be found to complete the work.

Even so, one of the recommended contract clauses, if implemented, suggests that the first clients of a bureau may be at a disadvantage. The clause stipulates that patent, copyright and other property rights in programs written under contracts will be vested in the bureau concerned, which will reserve the right to use all or part of them for other applications. The inference seems to be that when the same program can be

used for several clients, there will be much to be said for not being among the first customers.

Anxieties like this apart, the publication of the code is to be welcomed, particularly because it has now become plain that the computer bureaux have an important part to play in the provision of computer facilities for companies not large enough to operate their own machines. It is therefore something of a surprise that earlier anxieties about the emergence of the National Data Processing Service seem to have been dispelled. The association now says that competition in this field is to be welcomed, but nobody can know whether this is merely an oblique reference to the snail's pace at which the National Data Processing Service is being established. On present form, the bureaux have nothing to worry about.

IBP

New Theme Song

THE US committee of the International Biological Programme under its new chairman, Professor W. F. Blair of the University of Texas, is taking the opportunity of the annual meeting of the American Institute of Biological Sciences (AIBS) at Ohio State University this week to drum up support for its plans. Though the plans are well conceived, funds are still chronically short and so, to some extent, is talent.

Since Dr Blair's accession to the chairmanship, the US committee has adopted a new slogan for its efforts—"Man's Survival in a Changing World". The IBP symposium at the AIBS meeting aims to illustrate this theme. Dr F. Sargent of the University of Wisconsin, who is himself involved in research on circumpolar peoples and the American Eskimos in particular, will contribute a paper. Dr F. E. Smith of the University of Michigan is to describe the involvement of the US IBP in environmental research and, in particular, the major project on large ecosystems. The chairman, Dr Blair, is taking the bull by the horns by considering "How International is the International Biological Programme?", and the practical approach is represented by Congressman George P. Miller of California, who has long been known for his active chairmanship of the House Committee on Science and Astronautics. It is too soon to know whether what seems to be a concerted publicity campaign will win friends, with money to spend, but Dr Blair is evidently full of hope.

INFORMATION

Computers on the March

PLANS are going ahead well for the introduction in January 1969 of a comprehensive computer-based information service involving all the significant published literature available in the fields of physics, electronics, electrical engineering, control engineering and computer science. The scheme, INSPEC (Information Service in Physics, Electrotechnology and Control), is being developed by the Institution of Electrical Engineers (IEE) in cooperation with the Institute of Physics and the Physical Society and the Institution of Electronic and Radio Engineers in the United Kingdom, and the American Institute of Physics and the Institute of Electrical and Electronics Engineers in the United

States. Two large German organizations, and French groups, are also associated with INSPEC.

From January 1969, all the INSPEC publications—*Physics Abstracts*, *Electrical and Electronics Abstracts*, *Control Abstracts* and the associated journals in the *Current Papers* series—will be produced by computer controlled photo-typesetting. The publications will for the first time cover selected patents, reports and dissertations as well as additional journals to make the service more comprehensive. Computer science will also be covered and the abstracting service *Control Abstracts* will be renamed *Computer and Control Abstracts*. At the moment *Physics Abstracts* is published monthly but, with the wider coverage planned, it will come out fortnightly in 1969.

Current Papers, the classified listings of titles, authors and source references, will also change in format and coverage with the introduction of computer typesetting. The coverage will be more comprehensive and titles of two of the three publications in the series will change to reflect the new scope; for example, *Current Papers in Control* will become *Current Papers in Computers and Control*, and *Current Papers in Electrotechnology* will become *Current Papers in Electrical and Electronics Engineering*. The title of *Current Papers in Physics* will remain unchanged.

It is also hoped to use the computer store of information on magnetic tape in other ways—for example, for a Selective Dissemination of Information Service (SDI) and for information retrieval. An experimental SDI service has been in operation for some time now but only in the field of electronics. It is hoped to expand this into physics and control when the whole INSPEC service is under way next year.

The INSPEC project is supported to the end of 1969 by a grant from the Office of Science and Technical Information, a branch of the Department of Education and Science, of about £150,000. At the Institution of Electrical Engineers, the hope is to have a trial run of the new information service in parallel with the present system some time toward the end of the year before the official introduction of INSPEC in January. A system as sophisticated as INSPEC requires cooperation on an international scale, and for some time now the Institution of Electrical Engineers has been working in this field with American institutes. French and German organizations are now helping with INSPEC on a reciprocal basis—it seems there will be exchanges of magnetic tapes holding relevant data with similar information services in Europe.

SEISMOLOGY

The Kakhk Earthquake

THE earthquake which devastated a large area of north-eastern Iran last Saturday is already known to have killed more than 12,000 people and the final casualty figure is likely to be at least twice as great. Minor tremors are frequent in Iran and it is only 6 years since the earthquake at Qazvin, in which 12,000 people lost their lives. The occurrence of earthquakes in Iran is related to the general instability of the area. Iran straddles the system of mountain ranges which stretches from the Alps to the Himalayas and which was thrown up by the movement of Africa and India towards the Eurasian land mass. This movement is