

which Prof. Read gives an interesting account. Davidson, educated in Aberdeen, where he graduated M.A. in 1617, was a third son and decided to migrate; he left for Paris on the completion of his studies and gave lectures on medical chemistry until his appointment to the Jardin du Roi, now the Jardin des Plantes with its famous institute, the Muséum National d'Histoire Naturelle; however, the growing religious intolerance in France led to his resignation in 1651 and his departure for Warsaw to become first physician to John Casimir, King of Poland, whence he returned to Paris in 1669, dying shortly afterwards.

#### Electrical Research Association: Annual General Meeting

At a luncheon marking the annual general meeting of the Electrical Research Association held in London on February 22, reference was made to the Association's appeal to its members for finances in order to build new research laboratories at Leatherhead. This appeal has two objectives: an increase in the annual revenue, and a contribution towards the capital building fund. As regards the former, there has been a change in the conditions of the block grant made to the Association by the Department of Scientific and Industrial Research: the maximum possible grant is raised from £70,000 to £100,000 a year, but to qualify for this latter sum members' subscriptions must be increased to a total of £170,000 a year. At present the subscriptions total about £120,000, and the Council of the Association recommends that contributions during the next three years should be increased as follows: 1951-52, £140,000; 1952-53, £155,000; 1953-54, £170,000. Adding to these figures the government grant, the respective totals for the years will be £210,000, £240,000 and £270,000. It is estimated that the building of the new laboratories will cost about £400,000, of which about half must be directly raised from members, the remainder being available from accumulated reserves and from a special government grant. The members are therefore being asked to contribute a sum equal to twice their current annual subscription, payment being made in a lump sum or spread over the next two or three years. Both the annual subscription and the capital contribution qualify for deduction as expenses in computing the profits or losses of the trade for the purpose of income tax. The existing laboratories of the Association at Perivale, which were built in 1935, are no longer adequate. All the work at present being done there will be transferred to the new laboratories at Leatherhead as soon as the latter are ready, except for certain heavy testing facilities for which no provision has as yet been made in the new buildings, although adequate space exists on the site. When, finally, this last section is moved, it is planned to dispose of the Perivale premises. There are at present twenty-two technical sections in the Association, and the staff employed numbers about three hundred. In addition to the fruits of this research, members derive the benefit of nearly a thousand experts who comprise the technical committees which assist and guide the work of the staff.

#### African Soils—*Sols Africains*

THE Inter-African Information Bureau for Soil Conservation and Land Utilization, formed in 1949 to collect and disseminate information on all aspects of soil conservation, has issued the first number of a quarterly bulletin *African Soils*, or *Sols Africains* (1, No. 1, October 1951; 325 francs, or 1,250 francs a

year. Paris 5<sup>e</sup>: 57 rue Cuvier), which will be the organ through which the work of the Bureau is presented to the world. The Bureau has the support of the Governments of Belgium, France, Portugal, South Africa and the United Kingdom. The first number of the bulletin contains a foreword by Sir Geoffrey Clay describing the aims of the Bureau, four general articles on the state of soil conservation in different parts of Africa, an article on inter-African organizations for soil conservation (mainly the Bureau itself) and another on the Fourth International Congress of Soil Science. There are also a few extracts from published works and a short list of books received at the Bureau. The Bulletin is in French on the left-hand, and in English on the right-hand, pages. It would be an advantage to the reader if separate French and English editions could be produced. The first number is clearly of an experimental nature, but there is little doubt that, as the requirements of a rather ill-defined audience of administrators and field-workers in soil conservation become better known, the bulletin will serve a useful purpose.

#### Automatic Unit for Processing X-Ray Films

AN automatic unit for processing X-ray films, the first device of its kind to be designed, manufactured and offered for sale in Great Britain, has recently been put on the market by Messrs. Nucleonic and Radiological Developments, Ltd., 22 Marshgate Lane, London, E.15; such a unit is deserving of attention from all who are faced with establishing uniform processing conditions for large numbers of X-ray films. During processing, the films are mounted on metal frames across the top of which is an extension piece. When immersed in the developer, the frame is supported by these extensions resting on two endless belts, one on each side of the unit. The belts are driven by a constant-speed motor, and thus the film is conveyed through the solution. Transfer from developer to fixer, and fixer to the wash tank, is effected by means of a pneumatic lift and transfer units, the film being moved through each tank on the endless belts. Several noteworthy features are incorporated in the unit. During the transfer from developer to fixer, the film is rinsed by an automatically controlled spray. The conveyer belts ensure constant times of development, fixation and washing. Accurate control of developer temperature is provided for by thermostatically controlled heating and refrigerating coils in the water jacket surrounding the developer tank. A light lock between the fixer and the final wash tank enables the latter tank to be outside the dark room, so facilitating early examination of films. The manufacturers state that for X-ray film used in hospitals a technique has been evolved for so adjusting the developer solution from day to day that its activity remains substantially unchanged almost indefinitely. Doubtless it would be possible to devise a similar technique for other types of film. The peak capacity of the unit is 120 frames an hour, each frame carrying one or more films depending on their area. Undoubtedly the facilities offered by this automatic unit provide an advance in the technique of film processing. If the advantages claimed for it in respect of uniformity of development, saving in labour and materials, and simplicity in action are realized in practice, it may well replace the present human element of error in dark-room work by a degree of precision comparable with that obtained in the continuous processing of cinematograph film.