distribution of work and the products of our industries. Chemistry can no longer be thought of as an isolated branch of science, and independent of the rest of our lives. While providing for the development of personality and initiative, it is necessary to restrain those who will not contribute their share in co-operative service. Discussing the growth of the American Chemical Society, Prof. Noyes referred to the proposal to start a journal of organic chemistry as the outcome of a feeling that the Society does not sufficiently provide for the publication of non-industrial research. Emphasising the fact that chemistry is not an isolated science sharply divided from physics, biology, or even economics, sociology and political science, Prof. Noyes suggested instead the publication of the existing journal in two parts. The first part, published early each month, would contain the papers at present classified under the heading, "General, Physical and Inorganic". The second part, published late in each month, would appear under the sub-heading "Organic and Biological". Both parts would appear under the heading *Journal of the American Chemical Society*, and the pagination would be continuous. A single index would be issued, but each part would have its own editor. In concluding, Prof. Noyes discussed the question of training, the importance of giving all students a broad knowledge of our chemical heritage, and of encouraging the chemist to see his work as a unit in a co-operative democratic organisation which serves the community and gives a reasonable return to workers, directors and capital.

"Purging" Scientific Literature in Germany

THE *Chemiker Zeitung* of November 30, p. 978, prints a notice to German chemists requiring them in future to avoid the use of "foreign" words. It is explained that this can easily be accomplished, and among the illustrations given appear the following:

Förderanlage	instead of	Transportanlage
wirtschaftlich	,,	rationell
für, or je	,,	pro
durchlassig	,,	porös
zusammenpressen	,,	komprimieren
Nachahmung	,,	Imitation
Stück	,,	Exemplar
Ausmasse	,,	Dimensionen
umgrenzen	,,	definieren
Hochstwert	,,	Maximum
Tiefstwert or Niedrigstwert	,,	Minimum.

Vorbild, *Form* or *Muster* are suggested as alternatives to *Schema*, but the Editor, having perhaps seen comments on this subject in the notice of Joos' "Lehrbuch der theoretischen Physik" and in subsequent correspondence in NATURE (September 28, p. 495, and October 26, p. 675), points out that such innovations as *Kleinsehwerkzeug* for *Mikroskop* and *Scheidekunst* for *Chemie* should not be adopted, as they might be regarded as ridiculous by others.

New Telephone Developments

IN the *Review* (No. 3, 1935), published in English by the Ericsson Telephone Factory of Stockholm, there are described two interesting developments of telephony. One of them is called the 'laryngophone' which has been specially designed for use in aircraft. Owing to the noise in airships, ordinary carbon microphones with diaphragms cannot be used. The diaphragm of the new telephone is actuated by being lightly pressed against the throat in the neighbourhood of the larynx. For aircraft, it is necessary to have both hands free, and a headphone of normal design can be conveniently fitted in the pilot's helmet, the laryngophone being worn without discomfort inside his collar, extraneous noise not being transmitted by it. This type of instrument can be usefully applied for fire control on warships, in engine rooms, on motor vehicles, tanks, etc. The other instrument is useful in connexion with the buoy-telephones which have for many years been used in the submarines of the Swedish navy. In the latest development, two buoys, with buoy telephones, are used. Each buoy contains a telephone set, and an electric lamp is fitted on the top of it. Flash signals are sent from the submarine to attract attention to the buoy. An instruction plate on the buoy tells how to open the lid of the compartment containing the telephone set, and the submarine is rung up in accordance with the directions printed on a plate on the telephone cover. Buoy telephones are fitted at each end of the submarine. The lamps are supplied from the 110 volt accumulator of the submarine and light up when a watertight telegraph key is closed.

The British Film Institute

THE British Film Institute's second annual report, issued on October 1, records notable advances (long overdue) in its task of "furthering effective co-operation between those who make, distribute, and exhibit films on the one hand, and all who are interested in the artistic, educational, and cultural possibilities of films on the other". The scope of its activities is indicated by the chapter headings: The Cinema for the Schools, Free Trade in Educational Films, National Film Library, Vouchers of Approval, Entertainment Panel, Dominions, India and Colonies Panel, Medical Panel, Scientific Research Panel, Summer Schools, International. Its regular publications comprise *Sight and Sound*, on sale to the general public at 6*d*., quarterly; a monthly film review on sale to associate members at 2*d*.; and news letters circulated to members. In addition, there are occasional leaflets of which the best known, No. 5, on projection apparatus and films for schools, achieved a circulation of nearly 10,000; another, No. 8, gives a full account of the National Film Library established by the Institute last July. A scheme has been worked out for the award by the Institute of vouchers of approval to films voluntarily submitted to it for examination and, as a corollary of this, expert and authoritative advice is given to producers before and during production. The Entertainment Panel has undertaken a systematic inquiry

into the supply of suitable films for children's performances. The Medical Panel has compiled a catalogue of British medical films and will issue supplements from time to time. The Scientific Research Panel is collecting material for a report on the extent to which the cinematograph is, and can be, used in the advance of scientific knowledge. The first Film Summer School for teachers was held at Scarborough last August. Ten local branches, known as Film Institute Societies, have been at work during the year, at Becontree, Bristol, Brighton, Chichester, Leeds, London, Manchester, Liverpool, Belfast and Salford.

Research and the British Academy

PROF. J. W. MACKAIL, in his presidential address to the British Academy delivered in July last (Oxford University Press, pp. 11. 1*s*. net), laid it down as a principle that "the products of the Academy as an organised body . . . are all, in their different ways, and from their different angles and lines of approach, means towards an end", which he went on to define further as including two interlinked motives: to maintain a standard of learning and to preserve the continuity of civilisation. This view of the functions of the Academy would lay a heavy burden of responsibility on any body, however august; but if the further dictum be accepted that it is by the first that the second may be most directly and most effectively attained, it adds an impressive weight to the opinion the president expressed at an earlier stage in his address, that the Academy's grant from the Treasury of £2,000, only recently restored to its full amount, is quite inadequate. In the field of pure scholarship, certain enterprises, it is true, have been able to make progress through the Academy's subsidy. Yet even here, in what might be regarded as the Academy's special province, in number they make a poor showing. In the vast and wider fields of humanistic studies the prospect is even less encouraging. In archæological research, now that the excavations at Samaria have been brought to an end, apart from the contribution to the British School of Archæology in Iraq, which stands in a special category, the only body to which the Academy contributes is the British School of Archæology in Jerusalem. Archæological research unfortunately falls between the two stools of science and letters, belonging to the one by its technique, to the other in the applications of its results. This contention apart, in comparison with Continental academies, the British Academy is second to none in the standing of its fellowship; but its material contribution, as a body, to the advancement of the subjects which have been brought within its purview is negligible.

Mining in Tanganyika Territory

WE have received an interesting pamphlet from Tanganyika Territory entitled "Mining Publicity Pamphlet", and issued by the Department of Land and Mines. It shows at the outset a useful map of the Territory, and after a short introduction there is full information for all prospective immigrants, including such points as the customs duties and the mining and prospecting laws which have been adopted. There is an account of the geology and physiography of the Territory, and economic minerals and mineral production are fully described. We find, for example, that the value of mineral production has increased largely and in many cases has doubled since 1932 when Great Britain went off the gold standard, with a correspondingly rapid rise in the price of the precious metal; in fact, the value of all minerals has increased since 1932 with the exception of mica, which is less than half in 1934 what it was in 1932; whilst the value of the minerals produced is put down as close on £200,000 in 1932, in 1934 they had risen to close upon £364,000. Gold mining is, of course, a great attraction at present, although the pamphlet states that "it is to be anticipated that the internal prosperity it [gold production] is creating will exert its beneficial influence on other forms of mining within the territory". This is one of the few regions where the old-time prospector still finds work, and existing gold fields, containing both reef gold and alluvial gold, are fully described in the pamphlet in question. The pamphlet is of distinct use to immigrants proposing to enter Tanganyika Territory, and its perusal is strongly recommended to any who are proposing to go out, and especially perhaps to those intending to follow gold mining.

The Spahlinger Tuberculosis Vaccine

A JOINT committee on tuberculosis of the Medical Research Council and the Agricultural Research Council has issued in the form of a green paper (London: H.M. Stationery Office, 2*d*. net) observations on the experiment with Spahlinger vaccine in Northern Ireland, the report on which was issued some weeks ago. In this experiment, 11 calves were vaccinated with the Spahlinger anti-tuberculosis vaccine, and 7 calves were kept unvaccinated as controls. Six months after the vaccination, all the calves were given the same dose of virulent tubercle bacilli intravenously. The difference in the effect on the two groups was striking. Of the 7 controls five died of acute tuberculosis within 25–73 days. On the other hand, none of the 11 vaccinated animals died from the acute disease, one died on the 607th day, and the remaining 10 lived until slaughtered on the 783rd–890th day. All, except one, of these were in good condition although found to be tuberculous to greater or less extent. The joint committee concludes that a case has been made out for further investigation, that the number of animals used in the Irish experiment were not enough to give statistically conclusive results, and that the general use of the vaccine should be deferred until a thorough investigation has been made.

The Physique of Man in Industry

IN 1927, the Industrial Fatigue (now Health) Research Board published a report of an inquiry on "The Physique of Women". The results of this inquiry appeared to be of such value that the Board decided to institute an investigation of the same kind