

News and Views

Tariff Commission and a Scientific Policy

THE creation of a Tariff Commission, or, as it is called, Import Duties Advisory Committee, as part of the Government's general tariff plan has implications which go far beyond the theoretical merits of 'free trade' or 'protection', and are of special interest to scientific workers. As Capt. Harold Macmillan, M.P., points out in recent articles (cf. *Week-End Review*, Jan. 30, and *Sunday Times*, Feb. 14), Britain suffers particularly from the chaotic market conditions which affect all countries, because not only is a large proportion of its production for export, but also because alone among nations it has a home market open to unrestricted competition. In the absence of any protective device, British economic development is being determined not by our own decisions but by the fluctuating disorder of world trade. The old fiscal controversy having now been resolved in principle by the Government decision to apply tariffs to a wide range of manufactures, the question of practice and of the purpose for which tariffs are to be applied becomes of primary importance. It is clear that both ministers and other members of Parliament are now prepared to consider the economic and financial aspects of a tariff policy in relation to the reorganisation, modernisation, and readjustment of industry as part of a definite plan of national and imperial policy. The execution of any such constructive policy, involving the application of scientific methods in this difficult and contentious field, requires a wealth of detailed information regarding the relations between different industries, their productive capacity, efficiency, their importance in the general national economy, the merits of their plans of reconstruction, and so forth.

Scientific and Industrial Development

THIS information and the essential co-operation of industry can probably only be secured by the creation of representative councils for each of the great national industries, and in this way the Tariff Commission will be brought face to face with rationalisation problems, technical questions of scientific development, industrial organisation, and management. In addition to the technical advice of industrial representatives, the co-operation of the banks, co-ordinated, for example, through some such body as the Bankers' Industrial Development Trust, will be required, since intelligent use of the powers of the Committee involves the complete supervision of every question relating to industrial and commercial development. If the Government proposals are indeed directed towards the evolution of such a deliberately planned national economy, there will undoubtedly occur opportunities of making representations to the Commission upon the scientific position of many of our great industries the development of which is dependent upon technical control and scientific research. It is desirable that the Commission should be aware of what scientific opinion is on such great

industries as the textile industry, the iron and steel industry, etc., and it is incumbent upon representatives of science to follow these developments with the closest attention and to seize the earliest opportunity of making representations or affording other assistance towards the evolution of a creative and scientific national policy.

Tariffs and Imported Scientific Books

THE text of the Import Duties Bill, whereby an *ad valorem* duty of 10 per cent is to be charged on goods imported into Great Britain, has been issued, and we are glad to see that newspapers, periodicals, and printed books, and radium compounds and ores are among the articles exempted from the impost. As was pointed out in our issue of Feb. 6, p. 195, the revenue to be expected from a tax on imported scientific literature is negligible; the only effect of such a duty would be to increase the cost of scientific research. It is encouraging to find that this aspect of the matter is appreciated in Government circles, and that, amid the many claims for exemption which have, no doubt, been put forward, consideration has been given to the needs of scientific workers. Affairs do not seem to be so well ordered in Australia. It will be recalled (*NATURE*, Nov. 28, 1931, p. 900) that the Commonwealth has in force a duty of 10 per cent on imported books and a sales tax of 6 per cent; this, with the depreciation in Australian money, has proved a serious handicap. Incidentally, it has demonstrated our contention that, as a source of revenue, an import tax on books is not worth consideration. However, it is stated by the Canberra correspondent of the *Times*, in a message dated Feb. 11, that a deputation including Sir George Julius, chairman of the Council for Scientific and Industrial Research, has waited on the Prime Minister, Mr. Lyons, who has promised to consider the exemption of historical records and scientific periodicals, although he will not consider the early and total remission of the sales tax.

Discovery and Uses of X-Rays

SEVERAL letters have appeared recently in the *Times* on Prof. W. C. Röntgen's discovery of X-rays and their early use in surgery. As *NATURE* is mentioned by three of the correspondents, it may be worth while to recall the association of this journal with the notices of the discovery. General announcements appeared in the daily Press on Jan. 7, 1896, to the effect that Röntgen, who was then professor of physics in the University of Würzburg, had discovered that a number of substances which are opaque to visible rays of light are transparent to waves capable of affecting a photographic plate. A note upon these reports appeared in *NATURE* of Jan. 16, 1896 (vol. 53, p. 253). In the issue of the following week, Jan. 23, we published a letter from Sir Arthur Schuster on the physical significance of Röntgen's observations, and Sir Arthur himself arranged for the translation into English of Röntgen's

paper "On a New Kind of Rays" from the *Sitzungsberichte der Würzburger Gesellschaft*, 1895, which appeared in the same issue. This, we believe, was the first complete account of Röntgen's work published in England. To the same issue (Jan. 23, p. 276) the late Mr. A. A. Campbell Swinton contributed an article describing how, "Working upon the lines indicated in the telegrams from Vienna, recently published in the daily papers, I have, with the assistance of Mr. J. C. M. Stanton, repeated many of Prof. Röntgen's experiments with entire success"; and his article was illustrated by an X-ray photograph of a human hand taken by him with a Crookes tube. In the following three months as many as one hundred and fifty-five notes and original communications upon X-rays and their applications appeared in our columns.

Gold Medal for Astronomy

THE award of the gold medal of the Royal Astronomical Society to Dr. R. G. Aitken, director of the Lick Observatory, Mount Hamilton, California, was the subject of the presidential address given by Dr. Knox-Shaw, Radcliffe Observer, Oxford, at the annual general meeting of the Society on Feb. 12. The actual presentation of the medal is deferred until May 13, when the medallist is coming to London to deliver the George Darwin lecture; the subject of this has not yet been announced, but it will probably be connected with double stars. Dr. Knox-Shaw began his address by giving a description of the state of double-star astronomy in the middle of the last century; it was taken for granted that the work of the two Herschels and the two Struves had exhausted the mine of possible discoveries, at least in the northern hemisphere, and that it only remained to continue the observation of the known pairs, with a view of obtaining better orbits.

Dr. Aitken and other Double-Star Observers

WITH the advent of the great American telescopes a new era began. It became possible to detect much closer pairs than before; these offered such a large field that for the first time a distance limit was fixed, beyond which stars should not rank as doubles. This was taken as 5" for stars of the ninth magnitude, but was made wider for brighter stars and for stars of large common proper motion. S. W. Burnham was the first to make a great advance in this direction; in 1906 he brought out a great catalogue of 13,665 pairs, more than two thousand of these being his own discoveries. Dr. Aitken has been a worthy successor. With the aid of Dr. Hussey, who was his fellow-worker for many years, about four thousand new pairs have been found, and a new general catalogue is in course of formation. An important point is that many of the new pairs are extremely close (separation less than half a second). As was to be expected, many of these close pairs showed fairly rapid motion; in fact, one of them has completed a revolution since discovery; Dr. Aitken enjoys the distinction of having made all the observations upon it, and also of computing its orbit. From a physical point of view, the chief importance of double-star astronomy is

the information that it leads to on the masses of the stars. At the beginning of this century not more than a dozen star-masses were known with any accuracy; the number has now been greatly increased, the study of eclipsing binaries having added to it. As a result, Sir Arthur Eddington was able to deduce the law correlating mass with absolute magnitude. This important law rests largely on such work as that carried on by Dr. Aitken.

Gold Medal of the Hunterian Society

THE Hunterian Society, the oldest medical society in London, offers annually or periodically for competition a medal bearing the profile of John Hunter. It is open to all general medical practitioners resident in Great Britain, Ireland, and the Channel Islands, and is awarded for an essay. The subject of the essay is chosen by the writers from any subject in the medical sciences, and each essay has to be written under a motto or device and is accompanied by a sealed envelope containing the writer's name. In 1931 the Council recommended that the medal should be of gold instead of silver as heretofore, and that a new design should be struck. Accordingly, Mr. Thornton Shiells, with Mr. H. Youngman, engraver, produced a gold medal the size of a crown piece. The original designs and the plaster medallion made for the purpose are now preserved in the Library of the Society. For the first competition under the new régime a number of essays of high order were received, and the medal has been awarded to Dr. Griffith Ifor Evans, 37 Castle Square, Caernarvon, for an essay on "Chronic Familial Syphilis". Dr. Gwladys Victoria Smallpiece, of 365 Woodstock Road, Oxford, was declared "proxime accessit". The medal was presented to Dr. Griffith Evans at the annual dinner on Feb. 11. The next award of the gold medal will be made in 1933 for essays received on or before Dec. 31, 1932. The rules governing the award may be obtained on application to the honorary secretary of the Society, Mr. Andrew McAllister, 79 Wimpole Street, London, W.1.

Extension of University College, London

UNIVERSITY College, London, has acquired by purchase a site of two acres, formerly occupied by Messrs. Shoobred, immediately south of the buildings of the Faculty of Medical Sciences of the College. This is the largest addition to the site of the College made since its foundation more than one hundred years ago. The site acquired by the founders was some eight acres in extent, and most of the previous additions to the College have been confined to this area. So long as fifty years ago attempts were made by the College to buy the site, on which, eventually, were erected warehouses, depositories, and stables for Messrs. Shoobred. The site was too large for University College to buy or to occupy as a whole. The problem was solved by the Carnegie United Kingdom Trustees, who acquired part of the property as permanent headquarters for the National Central Library and the Library Association. In the College part of the territory there will be housed the Departments of