

The Italian Society for the Advancement of Science.

THE Italian Society for the Advancement of Science is not so ancient an institution as the British Association, but its objects are identical with those of its elder sister, and its methods are in many respects the same. In its present shape it dates from 1908, and its twelfth general session was held at Catania on April 5-11. This was the first occasion on which the Society has visited Sicily, and it was evidently a matter of friendly rivalry between visitors and hosts as to which could do most to make the meeting a success. Naturally the ancient "Università dei Studi" of Catania was in the forefront, with its picturesque and convenient Palazzo in the centre of the city, and its numerous laboratories and affiliated institutes in other quarters. Some sections, however, were lodged in the municipal buildings which overlook the University Piazza; and the opening meeting was held in the spacious Bellini Theatre, only a few minutes' walk from that square. The Italian Society does not share the apprehensions of some critics of our own Association in regard to multiplication of "sections": it enjoys no less than twenty-one of these, and includes in its scope, not only the physical, biological, and statistical sciences, but also medical, legal, philosophical, and historical studies. This accords with the organisation of higher studies in the faculties of Italian universities, and certainly has the effect of bringing a wider diversity of members together, without evident disadvantages.

Two other points of contrast with the procedure of the British Association may be noticed at this point. The inaugural address was delivered, not by the president of the Society, Prof. Pietro Bonfante, but by an honoured guest, the Minister of the Interior, Signor Gentile, who was supported by representatives of the ministries of Public Works and Justice, the War Office, and by the Admiral of the local squadron representing the Italian Admiralty. Shorter addresses of welcome were given by the president, and by Dr. Alessandro Russo, Rector Magnificus of the University, but there was no specialist presidential address as with us, nor were such addresses given by the presidents of sections. The sections, being more numerous, were more specialist than with us, and the attendance at them smaller. There appeared to be no such apparatus of sectional committees as we have, and the sectional proceedings were delightfully informal, and correspondingly profitable. Papers were short and gave the main points only, leaving details to be elicited in discussion. There was little display of specimens or diagrams, and one could have wished for more frequent illustration of objects and sites.

The great variety of the sections was compensated also by the custom (which has been advocated from time to time in the British Association also) of grouping sections in three large "classes," essentially of the physical, biological, and humanist sciences, and devoting quite half of the programme on each working day to discourses of general interest, some

delivered to a whole "class" of sections, which suspended their sectional meetings meanwhile, others to "reunited classes," *i.e.* practically to the Society as a whole. These more general lectures were admirably done, and in some instances led to animated discussion; exceptionally even to adjourned debate and to resolutions addressed to the Society as a whole, or to the Government. As the general, semi-general, and sectional parts of the programme alternated between morning and afternoon on different days, there was ample opportunity for local members to fit in a fair sample of the Society's work with their ordinary avocations.

Excursions and social intercourse were not forgotten. The *Regio Commissario* gave an evening reception; the Prefect of Catania gave another; there was a gala performance of Mascagni's opera *Il piccolo Marat*, conducted by the composer himself; there was a whole-day excursion round Etna, arranged through the Etnæan Railway Company, and admirably organised, both on the part of the *Congressisti* and on that of the townships on the route, which turned out in gala array with school children, banners, music, and lavish distribution of home-grown oranges. The Etnæans will long remember this invasion of the *scienziasti* of the peninsula; nor will the foreign guests forget the evident pride and confidence of the peasantry in the men who are doing so much to make that *terra di lavoro* the paradise which it deserves to become. Another day was devoted to the beautiful and historic Syracuse, which is easily reached from Catania by train. More specialist excursions to factories, agricultural stations, and other local establishments were arranged for those who desired them. A serious exploration of Etna had to be postponed, owing to inclement weather, until after the meeting; but even those who are not mountaineers could appreciate the amazing film-record of a mid-winter climb to the crater-rim, and the numerous papers on the habits and products of "our mountain," which, in spite of its occasional tantrums, is regarded with a queer mixture of reverence and affection by the Catanians, and becomes an object of daily inquiry and observance even to the foreign visitor. Its full glory, however, is not revealed at Catania; for that, you must go to Syracuse on such a day, cloudless and exquisite in form and colour, as fell to the good fortune of the Congress excursion.

Italian hospitality is proverbial, and the authorities of the Province, of the city of Catania, and of the University welcomed the *Congressisti* with open arms. Visitors, and especially foreign visitors, will not easily forget the many acts of unsolicited attention and courtesy which occurred during their stay, or the evident friendliness with which the Italian Society for the Advancement of Science is regarded in the locality of this year's meeting. Not the least durable token of this interest is the enrolment in Catania of about four hundred new members of the Society.

JOHN L. MYRES.

Industrial Paints and the Health of the Worker.¹

IT is unfortunate that a question as to the use or disuse of a paint which is, in essence, a matter of efficiency and industrial hygiene, should be com-

plicated by international and labour politics and by trade interests. Such has, for many years, been the position of the white-lead question.

In Great Britain, at least, the weight of evidence is to the effect that for covering power and durability, especially in exposed positions, there is no white paint or paint base equal to white lead. The one serious drawback to the use of this and of other lead compounds which are dissolved by dilute acids is their

¹ Committee on Industrial Paints: Report of the Departmental Committee appointed to re-examine the Danger of Lead Paints to Workers in the Painting Trades, and the Comparative Efficiency, Cost, and Effects on the Health of Workers, of Lead and Leadless Paints, and to advise whether any modifications of the conclusions and recommendations of the Departmental Committees appointed in 1911 have become necessary. Pp. 66. (London: H.M. Stationery Office, 1923.) 2s. 6d. net.

undoubted poisonous character. So impressed were the two Departmental Committees appointed in 1911 to investigate the incidence of lead poisoning in the two largest trades concerned with painting—buildings and vehicles respectively—that they recommended that, except for special classes of work of very minor importance, the use of paints containing more than a very small percentage of lead compounds soluble in dilute acid should be prohibited.

During the War much experience was gained with many materials, and the mere omission to repaint so many buildings and other structures enabled much valuable information to be gained. In 1921 the Home Office found that the information collected in view of the consideration of the use of lead paints by the International Labour Organisation of the League of Nations, was not in the main in accord with the findings of the 1911 committees. Another Departmental Committee, with Sir Henry Norman as chairman, has therefore reviewed the whole question and come to rather different and, it may be said, more reasonable conclusions.

The Committee is satisfied that the specific illnesses of the paint trade are due to lead poisoning and not, as Sir Kenneth Goadby and Prof. H. E. Armstrong were inclined to maintain, to the fumes of turpentine or other hydrocarbon solvents. There certainly appears to be little evidence of chronic disease due to these substances when used apart from lead. The Committee considers it to be generally admitted that dust from the sand-papery of old or new paint-work

is almost the only cause of lead poisoning. The introduction of a waterproof sand-paper and the prohibition of dry rubbing-down bids fair to remove this main cause, and rules as to cleanliness simple enough to be enforceable may dispel minor causes.

Sir Frank Baines, of H.M.'s Office of Works, was emphatic as to the superiority of white-lead paint over any substitute for outdoor painting of buildings. Analyses of scrapings from various public buildings confirmed the view that zinc oxide coatings had almost disappeared, exposing the old lead paint beneath. On the other hand, it must be pointed out that leadless paints seem to have given satisfaction when used on vehicles.

Great Britain is pledged to bring in legislation to give effect to the decisions of the Labour Organisation of the League of Nations, and the Committee has prepared draft regulations accepted by both sides of the Joint Industrial Council. It seems doubtful, in view of much of the evidence, whether the prohibition of white lead in internal painting should be strictly enforced, but on the whole, the regulations are salutary and should reduce the number of cases of lead poisoning, while a system of medical inspection should prevent mild cases from becoming chronic.

Lord Askwith in the *Times* of April 4 points out certain international aspects of the question, and expresses the hope, partly on economic grounds, in view of the possibility of minimising danger from white lead, that prohibition of its use for internal painting in 1927 may not be enforced.

The Duddell Memorial of the Physical Society.

IN October 1920 the council of the Physical Society of London decided that Mr. W. du Bois Duddell's memory should be perpetuated, and invited the council of the Institution of Electrical Engineers and the council of the Röntgen Society to join in forming a committee to collect funds for the Duddell memorial. The following were the members of the Memorial Committee so formed: Sir William Bragg, Sir Horace Darwin, Sir R. T. Glazebrook, Dr. R. Knox, Prof. T. Mather, Mr. Roger T. Smith, and Mr. Robert S. Whipple. A gratifying response was made to the appeal, nearly 700*l.* being subscribed.

The council of the Physical Society, feeling that Duddell's name will always be associated with the development of scientific instruments, has decided that the memorial shall take the form of a bronze medal to be awarded periodically to those who have advanced knowledge by the invention or design of scientific instruments or of the materials or methods used in their construction. The interest on 400*l.* (invested in 5 per cent. inscribed stock) will be given to the recipients of the medal.

At a meeting of the Physical Society held on Friday, May 11, Sir William Bragg as chairman of the Memorial Committee handed to Dr. Alexander

Russell, the president of the Society, the dies for the medal and the scrip for the investment. Sir Richard Glazebrook, speaking also on behalf of the subscribers to the Memorial Fund, dwelt on Duddell's ability and labour.

Dr. Russell, in accepting the dies, etc., on behalf of the Society, expressed his pleasure that Duddell's work, and especially his work in connexion with the

Society, should be perpetuated by a memorial of this kind.

The medal (Fig. 1), which is in bronze, was designed by Mrs. Mary G. Gillick. The obverse shows the head of Duddell in profile, with his name "William Du Bois Duddell" written above it. The dates of his birth and death—1872 and 1917—are placed in Roman characters horizontally

across the medal. The artist has succeeded in showing in a striking manner the alert energy of Duddell as well as the erectness of his carriage. The reverse represents the quest of science for knowledge, a symbolic figure, throwing light on the mysteries of the earth. Above the figure the words "The Physical Society of London" appear, while below is the motto "Rerum naturam expandere," which may be freely translated, "To elucidate the causes of things."



FIG. 1.—Duddell Memorial medal to be presented periodically by the Physical Society of London to those who have advanced knowledge by the invention or design of scientific instruments or of the materials or methods used in their construction.