tion; and the measurement and recording of the minimum observations of any value of men as they are brought up for enrolment in the Forces, who would more nearly approach the standard of the general population, would overburden the medical officer, who already protests against the inadequate time allowed for individual examination owing to pressure of numbers.

The Settlement of Europe

THE admirable broadsheet "European Order and World Order" issued by Political and Economic Planning (P E P), a summary of which appears on p. 948 of this issue, should go far to clarify the confusion which has resulted from the use in current discussions of such terms as 'war aims' and 'peace aims'. The terms on which the belligerent powers will make peace can scarcely be usefully discussed until the outcome of the war is known. On the other hand, neutrals as well as belligerents will have to consider far-reaching measures for reconstruction and for establishing a new international order. This post-war question of reconstruction requires immediate discussion and study if a settlement which is both technically possible and politically acceptable is to be found. No international conference can be expected to do more than put into final form and ratify measures which have already been worked out by experts and approved by the political advisers of all the countries concerned. Moreover, it is neither necessary nor desirable that the reconstruction problem should be tackled simultaneously with that of establishing peace. Indeed the former is visualized usually as a long-term problem for which appropriate machinery must be kept in being over a term of years rather than weeks. The fact that P E P has thought it worth while to issue a broadsheet upon these problems indicates that they are already receiving serious, if unofficial, attention. It is at least encouraging that so many new minds are being brought to bear upon them and so many new ideas are being sifted and taking shape. The scientific and constructive approach outlined by Political and Economic Planning claims the closest attention by scientific workers, and may well help them to see in what direction their own contribution can most effectively be made.

Association of Scientific Workers

THE annual council meeting of the Association of Scientific Workers was held in London on November 25. In the report submitted by the Executive Committee, the activities of the Association during the past year were reviewed. These included general activities before the War, such as the Legal Committee and the Scientific Films Committee, and special activities since war broke out, which included the collection of information on the effect of the War on science and scientific workers. The Executive Committee had drawn up a tentative scheme for the setting up of a State Department for the Co-ordination of Science and had submitted this scheme to a number of scientific bodies for their comment; these bodies had in general replied that they could not work in this way to improve the status of science. A net increase in membership of 25 per cent during the last year was also reported. The president of the Association, Prof. F. G. Donnan, in his address to the meeting, stressed the necessity of building up activities that would have an economic appeal to potential members of the Association, and suggested the possibility of establishing an unemployment benefit fund. The Association, in trying to represent men of science of all subjects in one body, has a great task before it, and in view of the existence of many sectional organizations for men of science, it must offer strong inducements to gain members.

THE general feeling of the membership that the Association should do a great deal more in the day-to-day economic interests of the scientific workers, particularly those in industry, was expressed in the unanimous adoption of a resolution: "That steps be taken to ensure that the primary purpose of the Association is to effect the organisation of scientists, since any satisfactory co-ordination of science depends upon an adequate organisation of scientists". The deep concern felt by members of the Association at the rapidly increasing disorganization in scientific work throughout Great Britain was expressed in the discussion of two further resolutions, and while it was carried by a majority vote that the Association should not press for a Ministry of Science in the present circumstances, the Executive Committee was instructed to press for the establishment of a national council consisting of representative scientific and technical personnel, which would have the object of achieving adequate organization and full use of the scientific resources of the country. The following officers were elected for the year 1939–40: *President*, Prof. F. G. Donnan; *New Vice-Presidents*, Prof. P. M. S. Blackett, Prof. D. Keilin; *Hon. General Secretary*, Dr. W. A. Wooster; *Hon. Treasurer*, Dr. L. Klatzow.

New International Hormone Standards

IT was stated in NATURE of May 13, 1939, that the Third International Conference on the Standardisation of Hormones, held at Geneva in 1939, had decided that international standards should be established for certain hormones of the anterior lobe of the pituitary gland and analogous substances found in urine and serum, and that international units should be defined in terms of a weight of each such standard. It was further decided that the final preparation of these standards, their dispensing in a form suitable for the use of the laboratory worker, their storage, preservation and subsequent distribution should be undertaken by the National Institute for Medical Research, Hampstead, London. The first of these new standards, as announced earlier in the year, namely, that for the gonadotrophic substance of human urine of pregnancy—chorionic gonadotrophin—was established in May of this year. The preparation of two additional international standards has been completed, namely, for the

gonadotrophic substance of pregnant mares' serum and for the lactogenic (crop-gland stimulating) substance of the anterior lobe of the pituitary gland. The former standard has been prepared from substantial amounts of material generously provided by five manufacturing firms in four different countries, and the latter from material supplied by seven manufacturing firms and two research institutes in five countries. In the case of each standard the individual samples were examined by members of the Conference and a suitable mixture was then made to serve as the respective international standard, and finally dispensed in the form of tablets which have been packed in sealed tubes. In the case of each standard, each tablet contains approximately 100 international units.

THE international standard for the gonadotrophic substance of pregnant mares' serum is dispensed in the form of 25-mgm. tablets, each sealed tube containing ten of the tablets, and the international unit has been defined as the specific gonadotrophic activity contained in 0·25 mgm. of the standard preparation. The international standard for prolactin is dispensed in the form of 10-mgm. tablets, each sealed tube containing ten of the tablets, and the international unit has been defined as the specific activity contained in 0·1 mgm. of the standard preparation. As in the case of the international standards for other hormones, drugs and vitamins, the above international standards are held, on behalf of the Health Organisation of the League of Nations, at the National Institute for Medical Research, Hampstead, London, N.W.3, and are distributed therefrom to national control centres established in other countries for local distribution to laboratories, institutes and research workers, and to workers in other countries in which the establishment of national control centres has not yet been completed. With regard to the supply of these new standards to those requiring them in the United Kingdom, applications should be made to the Department of Biological Standards, National Institute for Medical Research, Hampstead, London, N.W.3.

Standardizing Genetical Symbolism

AT the International Congress of Genetics held at Ithaca, N.Y., in 1932, it was resolved that the genetical societies of all countries be asked to co-operate in preparing recommendations regarding the problem of standardizing genetical symbolism, in order to discuss them at the next International Genetical Congress. Prof. Tine Tammes (Groningen), who was appointed to take charge of this work, produced a preliminary report in conjunction with Dr. H. de Haan and then turned over the task to the International Union of Biological Sciences. This body, together with the International Institute for Intellectual Co-operation at Paris, convoked a meeting of delegates from various countries, which was held in the rooms of the Linnean Society of London on August 14–15, 1939, with Prof. M. J. Sirks (Groningen) as chairman. The delegates were Dr. A. Eastlier and Miss N. Nicolsky (from the I.I.I.C. in Paris), Prof. O. Winge (Denmark), Dr. B. Ephrussi (France), Prof. H. Nachtsheim (Germany), Prof. R. R. Gates, Prof. J. B. S. Haldane and Mr. A. E. Watkins (Great Britain), Prof. K. v. Körösy (Hungary), Dr. K. Ramiah and Dr. S. N. Venkatraman (India), Prof. M. J. Sirks and Dr. S. J. Wellensiek (Holland), Prof. O. L. Mohr (Norway), Prof. M. Skalinska (Poland), Dr. O. Tedin (Sweden), Prof. F. Baltzer, Prof. A. Ernst and Prof. E. Hadorn (Switzerland), and Prof. E. W. Lindstrom (U.S.A.). The delegates from Belgium, Finland, Italy and Japan were unable to attend. A preliminary series of rules for the symbolizing of genes and chromosome aberrations was drawn up at this meeting.

Science and Ethics

IN the *Scientific Monthly* of October, Prof. E. G. Conklin discusses the question: "Does science afford a basis for ethics? The highest level of human development, he urges, is attained when purpose and freedom, joined to social emotions, training and habits, shape behaviour not only for personal but also for social satisfactions. Society, no less than the individual, is seeking satisfactions, and when all these things combine, we have what we call ethics, or the science of right conduct. Science, he considers, affords a sound basis for ethics in spite of the fact that it is regarded as natural rather than supernatural in origin and development. With increasing knowledge of Nature and man, many codes have been shown to be unreasonable and unethical, and science has helped to replace them by more rational and humane ones. Science is knowledge of Nature and of man, and ethics being dependent on such knowledge it is impossible to divorce ethics from science. Science did not create Nature or man or ethics, and cannot be held responsible for their imperfections. It is as absurd to attribute human greed, aggression, hate and war to science as it would be to hold it responsible for hurricanes, earthquakes or pestilences. Because science regards ethics as a natural phenomena, it can hope to determine the causes of unethical behaviour and attempt to improve ethics by controlling these causes.

PROF. CONKLIN thus believes that progress in the control of social disorders should be possible in the same way as in the control of bodily diseases. Science has helped to make war so terrible that sane people everywhere fear and shun it. More indirectly, science can investigate the causes of war and show how they can be removed, for war and social disorders in general can be cured only as bodily diseases are, by controlling their causes. The main hope for human peace and progress lies in the cultivation of habits that make for peace and progress, especially in the leaders of the nations. There can be no final solution of the problems which threaten the very existence of civilization except through the cultivation of a wider and more generous form of ethics. Hope for the future rests in the co-operation of science, education and religion.