

constituted as follows: F. Went, Utrecht, president; M. de Selys Longchamps, Brussels, secretary; A. Pictet, Geneva, treasurer; vice-presidents are the presidents of the sections and also the following: E. Terroine, Strasbourg; F. Botazzi, Naples; A. Lameere, Brussels.

The committees of the sections are constituted as follows: (a) Zoology—Odo de Buen, Madrid, president; M. Siedlicki, Cracow, vice-president; C. Verne, Paris, secretary. (b) Botany—B. Nemeč, Prague, president; K. Shibata, Tokyo, vice-president; J. Briquet, Geneva, secretary.

I conclude by expressing the wish that many countries which up till now have not joined the union will do so, because only then the union will become strong enough to undertake such work as will benefit biological sciences.

F. A. F. C. WENT

## QUOTATIONS

### INTELLECTUAL COOPERATION

THE movement towards what is known as intellectual cooperation, fostered by the League of Nations (writes our correspondent from Geneva), is steadily gaining ground. The Institute of Intellectual Cooperation, domiciled in Paris but a league offspring, is now subsidized by eleven nations. The committee which takes this sphere of the league's work under its control is presided over by Professor Gilbert Murray, in succession to the late Professor Lorentz, and has among its members some eminent European scientists, including more than one professor of medicine. Professor Gilbert Murray reported to the present assembly that interchanges of professors and students between universities in different countries had been encouraged, and that there was now proceeding an interchange of secondary-school teachers. These interchanges are of the same character as those of public-health officers, undertaken by the Health Organization, and appear to be equally fruitful. It is noteworthy that the American Council of Education has placed a sum of money at the disposal of the committee for the purpose of an inquiry into university relations in Europe and the facilities available there for American students. The question of traveling or exchange scholarships has been remitted to a committee of experts with a view—the reference is rather vague—"to reaching conclusions that will be applicable not only to scientific laboratories, but also to research institutes, in the field of humanities and social science." A draft convention has also been formulated with the object of assuring for scientists the financial benefits which are justified by the profitable

use of their discoveries—in other words, to prevent the unauthorized and unacknowledged use in one country of the work of a scientist of another. The British government, however, has found some technical fault in the convention, which as drawn up, it considers, would interfere with industrial activity, and the matter has not at present gone further than the sphere of proposal. An attempt is being made to bring libraries and universities of all countries into a scheme of cooperation whereby scientific or bibliographical information may be made mutually available. Another enterprise aims at the removal of undue hindrances, in the shape of customs barriers and postal tariffs, to the international distribution of books. It is intended to urge that scientific works, particularly works intended for libraries and scientific institutions, should be exempt from customs duties. The question of scientific works published in the less known languages has also received attention; it appears that in the countries where such works have been published there is already a sufficient recognition of the need of securing translations in one or other of the more widely diffused languages. The language difficulty, as any one who has attended an international congress will agree, is the principal hindrance to full international cooperation and understanding. In spite of the skilled army of interpreters at Geneva, difference of language is a constant impediment, leading every day to embarrassment and frustration, and sometimes to even more disagreeable results. If the Committee on Intellectual Cooperation would urge a wider acquaintance with the French language amongst English-speaking peoples, and with the English language among the Latin peoples, a great deal of good might be done.—*The British Medical Journal*.

## SPECIAL ARTICLES

### ALTERATIONS OF TISSUE CELLS IN THE BLOOD STREAM

CERTAIN aspects of the origin and development of blood cells are difficult to study because of the different fixation and staining qualities of the cells in the bone marrow and those in the blood stream. Fixation of the cells for sectioning changes their morphology so that they are no longer comparable to the pictures obtained when blood films are made. Some of the differences can be eliminated if bone marrow is shaken with blood serum or pleural or ascitic fluid. The cells separate easily, and cover-glass films can be made similar to those of blood. This method was found to be feasible for the study of tumor tissue, and was especially applicable for the study of mitotic figures. The phenomenon was first noted while studies of tissue