

(Dr. Omori); *Russia* (General Pomerantzeff, Prof. Lewitzky, Dr. Wosnesjenskij); *Switzerland* (Prof. Forel, Prof. Riggenbach). Among these thirty-five members there were sixteen official delegates for the different States, as follows:—*Austria-Hungary*, 1; *Belgium*, 1; *Germany*, 9; *Japan*, 1; *Russia*, 2; *Switzerland*, 2.

The principal object of the conference was the establishment of an international seismological union. After some discussion the *projet* of statutes of an "International Seismological Association," formed principally in imitation of the statutes of the International Catalogue Association and of the International Geodetic Association, was unanimously accepted by the conference, the chief points being as follows:—

§ 1. The object of the Association is the advancement of knowledge of all the seismological problems, which can be solved only by the cooperation of numerous seismological observatories all over the world. As the principal means of attaining this object are proposed:—(1) seismological observations according to fixed plans; (2) experiments on certain important seismological questions; (3) establishment and support of seismological stations in certain countries which need assistance from the Association; (4) organisation of a central bureau for collection and discussion of the reports from various countries.

§ 3. The parts of the Association are:—(1) general meeting; (2) permanent commission; (3) central bureau.

§ 5. The permanent commission consists of the director of the central bureau and of one member from each of the States which compose the Association. . . .

§ 8. Each State must duly communicate to the central bureau, through its local central bureau, the results of seismic observations and experiments.

§ 9. Each State must contribute to the central bureau a certain yearly sum of money, to be fixed in proportion to the number of the inhabitants. The sum thus contributed by the different States is to be appropriated to the following purposes:—(1) publications and administration; (2) remuneration to the general secretary; (3) support of those who work in special important seismological investigations; (4) support of those seismological observatories which are established by the Association. The distribution of the sum into these various items is to be decided by the permanent commission.

As to the seismological observations, experiments and publications in the different States, the latter have a perfect freedom. The choice of the instruments is also left free to each State. The statutes of the Association having been thus adopted by the conference, the further steps for the formation of the Association are now to be taken by the Imperial German Government through diplomatic channels.

As there is still one year or so before the Association can be actually formed, it was proposed by Prof. Helmert to establish a provisional central bureau and let the latter begin at once the function for the international seismological investigation, under the cooperation of all the members present, who approved the proposal and promised to send in publications and reports. Prof. Forel proposed, in the name of all the non-German members to select the Strassburg Seismological Observatory as the provisional central bureau, under the direction of Prof. Gerland. This proposal was accepted, the Association being thus provisionally formed. Besides the establishment of the statutes, there were given by Prof. Helmert and others a series of valuable reports and lectures on observational as well as theoretical seismology.

The first international seismological conference proved to be a very satisfactory one. The full minutes of the transactions are expected to be published shortly. F. OMORI.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

DR. R. T. HEWLETT, of the Jenner Institute of Preventive Medicine, has been appointed professor of general pathology and bacteriology at King's College, London.

THE following candidates have passed the D.Sc. examination of the University of London:—Mathematics and Physics, J. Buchanan; Experimental Physics, C. V. Drysdale, W. H. Eccles, P. E. Shaw; Chemistry, T. J. Baker, T. A. Henry, W. H. Hurlley, G. D. Lander, H. R. Le Sueur, S. Smiles.

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THE following regulation from the new Calendar of the Imperial University at Kyoto show that the Japanese are encouraging scientific research among University students:—"In June and December every year each student shall report to the director of the College, through his professor, the state and progress of research which he has made in his study of special subject; and the director shall submit such report to the Faculty meeting for examination. When a student has completed the work of research at the University Hall, he shall prepare a record of his career at the University and present it to the president of the University, through his professor." Progress is bound to be made where education is carried on in this spirit.

SCIENTIFIC SERIAL.

Bulletin of the American Mathematical Society, July.—Surfaces whose first and second fundamental forms are the second and first respectively of another surface, by Dr. Eisenhart, was read at the February meeting. The results arrived at are—the ruled surfaces, defined by the equations

$$y + \mu x = \sqrt{1 + \mu^2} + C_1 \mu + C_1 \\ z - ix \sqrt{1 + \mu^2} = \mu + C_1 \sqrt{1 + \mu^2} + C_3,$$

are the only surfaces whose first and second fundamental forms can be taken for the second and first fundamental forms of a surface. Further, the second surface is only the first to a translation *près*. And of these surfaces the only real one is the sphere of radius unity—the *C*'s, as usual, are arbitrary constants. References are given to work by Bianchi, Casorati, Monge and Forsyth.—On the groups generated by two operators, by Dr. G. A. Miller, was read at the April meeting. This short note, which gives several references, discusses the theorem, "every group that is generated by two operators of order two is a dihedral rotation group, and every dihedral rotation group is generated by two operators of order two."—Mr. G. Peirce gives a curious approximate construction for π , read at the same meeting. This is as neat a construction as we can remember.—Non-Euclidean geometry is a short notice, by J. L. Coolidge, of a work with this title by Dr. H. P. Manning.—J. K. Whittemore gives an extended abstract of "Vorlesungen über Differentialgeometrie" (pp. xvi + 659), a translation of Bianchi's work by M. Lukat.—Notes, new publications, tenth annual list of papers (read before the Society, with references to their places of publication), and a full index close the number and the volume.

SOCIETIES AND ACADEMIES.

LONDON.

Royal Society, June 20.—"Further Observations on Nova Persei. No. 3." By Sir Norman Lockyer, K.C.B., F.R.S.

In a former paper an account was given of the observations of the Nova, made at Kensington between March 5 and March 25 inclusive. The observations are now brought up to midnight of May 7. Between March 25 and the latter date, estimates of the magnitude of the Nova have been made on thirty-three evenings, visual observations of the spectrum on twenty-five evenings, and photographs of the spectrum on six evenings.

The 10-inch refractor with a McClean spectroscope has generally been used for eye observations. The 6-inch prismatic camera has not been available for photographing the spectrum owing to the faintness of the Nova, but photographs have been secured by Dr. Lockyer with the 30-inch reflector on the nights of March 27, April 1 and 12, and by Mr. Fowler on March 26 and April 4. With the 9-inch prismatic reflector the spectrum was photographed by Mr. Hodgson on March 30, April 1 and 4.

Change of Brightness.—Since March 25 the magnitude of the Nova has been undergoing further periodic variations, and although observations have not been made on every night since that date, owing to unfavourable weather, yet sufficient data have been gathered to enable a general idea of the light changes to be obtained, and the few gaps can be filled up later by other observers who experienced clearer skies on these occasions.

A table is given containing observations for magnitude made from March 26 to May 5 inclusive.