

status of radiology among the sciences. He was especially insistent on the fundamental value of physics to radiology, particularly in regard to methods of measurement and the designing of equipment, subjects in which he was deeply interested up to the time of his death.

Many in his own branch of the profession and a number of his friends and former patients, wishing to keep his memory green, have suggested that an appeal for funds should be made to found a Mackenzie Davidson Chair of Radiology at some university.

Had Mackenzie Davidson lived he would have been among the first actively and generously to support the foundation of an institute for teaching and research in radiology, of which he was one of the earliest pioneers. If funds permit, it is hoped to found such an institute, to which possibly the chair could be attached, and of which the personnel and equipment would be beyond reproach. The benefit accruing to the British School of Radiology would be incalculable.

Till quite recently radiology has been regarded as a purely medical subject, but experimental research has shown that X-rays may be profitably employed commercially in a number of industries. A new subject, radiometallography, has, for example, come into being, which offers great possibilities for examining the internal structure of metals and other materials. In this connection radiology has already been turned to account by the steel manufacturer, the metallurgist, the engineer, the manufacturer of explosives, the aircraft constructor, the glass manufacturer, etc.

The future of radiology will therefore lie, not only in the fight against disease and suffering, but also in the increase of commercial and industrial efficiency. But these new branches of radiology need much investigatory work before they can come fully into their own, and a chair of radiology associated with an X-ray institute should play a worthy part in such development.

THE ENGLISH UNION OF SCIENTIFIC WORKERS

Nature reports that the half-yearly council meeting of the National Union of Scientific Workers, presided over by Mr. G. S. Baker, of the National Physical Laboratory, was held at University College on March 6. The rapid growth of the union has necessitated the appointment of a full-time secretary, and Major A. G. Church has been appointed to fill that

office. The research committee in its report outlined the function of this body and that of the research council, which it is hoped will shortly be constituted. It will consider how best industry and public administration should be kept in close touch with the development of scientific knowledge, and ensure that the views and conditions of employment of scientific workers shall receive consideration from all bodies bringing forward schemes for research in science or for the administration of research. It was felt that the state should not subsidize industrial research associations unless such bodies display an anxiety to ensure that the direction of research shall be in the hands of those who have shown capacity for leadership in scientific work. A report on patent rights presented by Mr. A. A. Griffith emphasized the opinion "that the only satisfactory way of remunerating salaried inventors is to pay them adequate salaries; a salaried inventor receiving an adequate salary should have no claim whatever to any extra payment because his work proves unexpectedly remunerative." On the motion of Miss A. B. Dale, the council unanimously agreed to "protest against the differential treatment of men and women as regards the method of recruitment to the Civil Service and the salary scales offered therein as recommended by the Reorganization Sub-committee of the Civil Service National Whitley Council."

THE HARVARD ENGINEERING SCHOOL AND INDUSTRIAL COOPERATION

The Harvard Engineering School has adopted a new plan of instruction for the junior year of the engineering course, whereby students will hereafter be given an opportunity to combine classroom work with six months of active engineering practise and industrial training. According to the new plan, which will be inaugurated in June and will apply to the instruction in mechanical, electrical, civil, sanitary and municipal engineering, every student who wishes to take the industrial training work will spend half his time during his junior year working in industrial or engineering plants within easy reach of Cambridge.

Professor Hector J. Hughes, chairman of the administrative board of the engineering school, has made the following statement:

One of the first problems which the staff of the new engineering school set itself to solve was to find an effective way of getting the new school and its students into closer relations with industrial and engineering work before they graduate. The need for such relations has been increasingly evident in the past few years. The object of such coordination is manifold: to stimulate interest in the classroom work; to keep the teaching staff well-informed of the needs of industry and how to train engineers to meet them; to give the students some intimate knowledge of the great problems of labor and industry which they have to meet after they graduate, and thus to anticipate to some extent the period of initiation which all students must go through and better to fit them to begin their careers; to give them an opportunity to discover how intricate and interesting the basic industries are and to what extent scientific knowledge may be used in work which is too frequently looked upon as non-technical; in other words, to find out how many kinds of careers are open to technically trained men and how wide is the opportunity for such men. Another object of the new plan is to stimulate the interest of the industries themselves in the adaptation to their special needs of education in engineering.

The most promising solution of this problem seemed to the staff to lie along the lines of the highly developed and successful plan of industrial cooperation which was initiated by Dean Schneider at the University of Cincinnati and has been carried on there so successfully for many years, and has been applied in a modified form at the University of Pittsburgh also. This plan has been modified still further to meet the different conditions and needs at Harvard. It is significant that other universities are now moving in the same direction, and within only a few days a large movement has been inaugurated to put such a plan ultimately into effect in most of the large technical schools.

After a thorough study of the situation, the staff came to the conclusion that it would be highly desirable to offer our students an opportunity to get some industrial experience and engineering practise while undergraduates but without sacrifice of classroom instruction and without depriving them of the many advantages which attach to residence and study under teachers interested in other subjects

than science, and among students of widely differing interests. In other words, we feel that our students should have as many as possible of the benefits which we know will come from connection with the college, while they are at the same time carrying on their engineering studies. For this reason, and because it does not seem desirable to lengthen the period required for a first degree beyond four years, we shall be limited at the outset to less industrial experience than perhaps would be desirable. The amount offered, however, should be looked upon as a minimum and we have no doubt that many of our students will be glad to avail themselves of the opportunity to take more of this work after the plan is in operation.

Mr. H. V. Drufner, of the University of Cincinnati, has been secured to take active charge of the technical work of putting the new plan into operation.

THE FOREST CLUB CONVENTION IN NEW HAVEN

THE fourth annual convention of the Intercollegiate Association of Forestry Clubs was held in New Haven on Friday and Saturday, February 27-28, under the auspices of Yale, the present president club. There were twelve delegates present of whom two were from the Pacific coast. The meeting was in every way a distinct success and the sessions were well attended. Owing to the number of Yale alumni present the occasion partook of the nature of a reunion.

Among the business transacted at the meeting was the adoption of insignia for the association, the provision for a quarterly publication to be issued by the president club, and the election of the University of California as president for the coming year. The next convention will accordingly be held in Berkeley.

The following is the list of speakers and the subjects of their papers:

February 27

- The profession of forestry:* PROFESSOR H. H. CHAPMAN, New Haven, Conn.
How can the forester help the lumberman? T. L. BRISTOL, Ansonia, Conn.
The work of the consulting forester: J. T. ROTHERY, New York City.